

The University of Chicago

THE VOCATIONAL CHOICES
OF STUDENTS WHOSE RELIGIOUS
BELIEFS LIMIT THEIR OCCUPA-
TIONAL OPPORTUNITIES

A DISSERTATION SUBMITTED TO THE FACULTY
OF THE DIVISION OF THE SOCIAL SCIENCES
IN CANDIDACY FOR THE DEGREE OF DOCTOR
OF PHILOSOPHY

DEPARTMENT OF EDUCATION
1939

By
THOMAS WILSON STEEN

Private Edition, Distributed by
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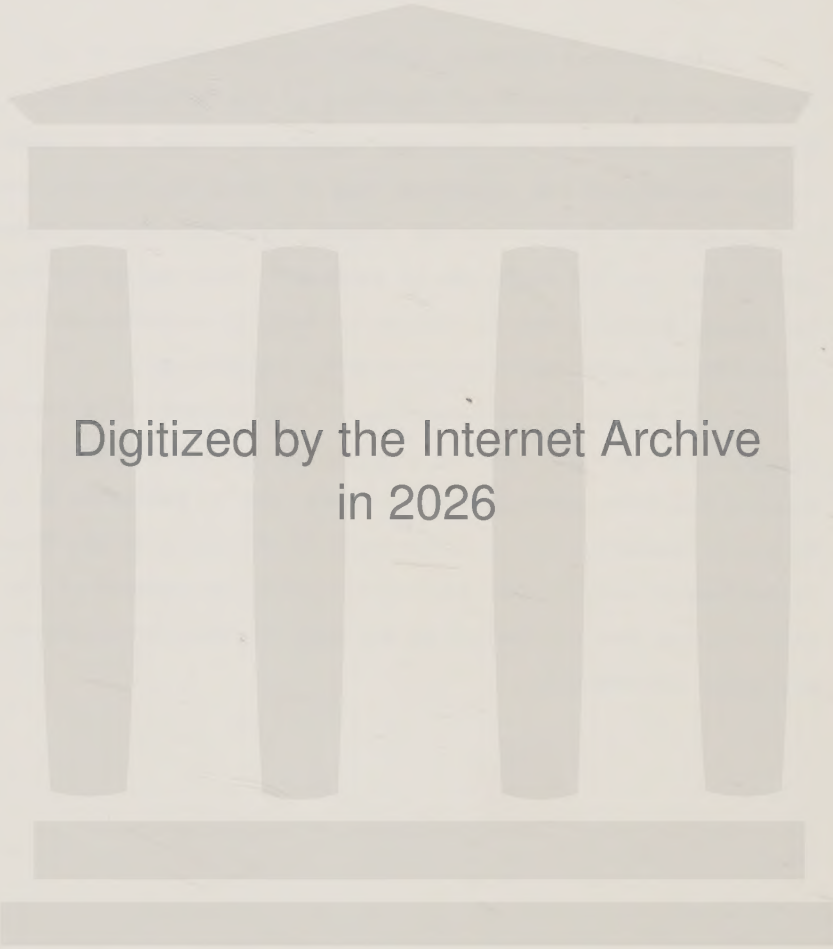
1939



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CHAPTER I

THE PROBLEM

The Purpose of the Study

The purpose of this study has been to inquire critically into the factors involved in the vocational adjustments being made by the students in Seventh-Day Adventist institutions of higher education in the United States and Canada.

The study has been confined to this small group of educational institutions and to the vocational problems of the youth of a social group of limited numbers because the youth of this denomination face certain definite and acute vocational problems not common to American college students in general. The recent emergence of certain new problems and the intensification of others of longer standing have made the study all the more urgent. The investigator trusts, however, that the findings of this study and the techniques employed will be of interest and value to other investigators and to groups confronted with quite different problems.

The Seventh-Day Adventist Church

The founders of what in later years became the Seventh-Day Adventist Church were, until about 1844, members of various Protestant congregations in New England. The emphasis placed by these individuals on their belief in the imminent return of Christ to the earth resulted in the exclusion of most of them from their former churches; and their acceptance of the seventh day of the week as the Sabbath eventually made it necessary for them to withdraw from the Adventist congregations that continued to regard Sunday as the Sabbath.

The relatively rapid growth of this numerically insignificant little group resulted in a church membership of about ten thousand by 1875 when the church entered upon its foreign mission program. The denomination is now established in almost every country and island group in the world; and, according to the

Statistical Secretary of the General Conference, was carrying on its work in 714 languages and dialects at the close of 1938.¹ The world membership as of December 31, 1937, was 452,758, according to the latest official statistical report.²

The membership in North America for the same year is given as 164,490. This figure does not include young children, since very few are baptized into church membership under fifteen years of age. If the ratio of children to adults in the Seventh-Day Adventist denomination is similar to that of the United States as a whole, then these 164,490 church members represent but 69.8 per cent of the total Adventist population when the children under fifteen years of age are included. According to the United States Census of 1930, 30.2 per cent³ of the population at that time were persons under fifteen years of age. Estimated on this basis, the Adventist population in North America at the close of 1937, including the children who had not yet become church members, reached a total of 235,660.

Adventist Beliefs That Limit the Range of Their Occupational Opportunities

The attitude of the Seventh-Day Adventist toward his participation in occupations is so definitely related to his religious convictions that it is impossible to understand the students' needs and problems without some insight into the Adventist beliefs and attitudes which most definitely affect their occupational activities.

The Seventh-Day Sabbath

Seventh-Day Adventists interpret the Scriptures very specifically in regard to the observance of the Sabbath. They hold that since Jesus and His disciples, and the prophets and priests who went before them, observed the seventh day from sundown Friday

¹Year Book of the Seventh-Day Adventist Denomination, p. 353. Washington: Review and Herald Publishing Association, 1939.

²Statistical Report of Seventh-Day Adventist Conferences, Missions, and Institutions. The Seventy-fifth Annual Report: 1937. Washington: General Conference of Seventh-Day Adventists.

³Statistical Abstract of the United States, 1937, p. 39. No. 59. Washington: Government Printing Office, 1938.

to sundown Saturday, they should so observe it, since they fail to find divine authorization for any other practice. Therefore, they hold that Adventists should not engage in ordinary business and work on the Sabbath. They would regard, for example, ordinary work such as that connected with the manufacture of goods and their distribution, the erection of buildings, and commercial activities of every kind, as inconsistent with the spirit of the Sabbath.

Applied to specific cases, they believe that a farmer should provide for the comfort of his animals on the Sabbath--such as food, water, and the milking of cows--but that he should not engage in such activities as planting, plowing, and reaping. The many sanitariums which they operate provide for the care and comfort of the patients on the Sabbath, but all of the work of the institution which can consistently be done on the preceding or following day is taken care of in that way. Even in the matter of surgery, the only operations performed from sundown Friday to sundown Saturday are such as could not be postponed without a hazard to the patient. No money is received or paid out, and no other business is transacted.

Attitude toward Bearing Arms

The Commandment "Thou shalt not kill" is interpreted by Adventists as applying not only to murder in the ordinary sense, but also to the taking of lives in a wholesale way. War is therefore inconsistent with their ideals. When an Adventist is called upon for military service, he ordinarily has already made special preparation for work in connection with the hospital units. He can justify his presence on the battlefield and the placing of himself in imminent danger of losing his own life, if he is doing so to bring in wounded men and care for them. This attitude he carries further so that he does not offer his services as a policeman or detective, or in other lines in which he may be called upon to take human life.

Attitude toward Tobacco, Liquor, and Commercialized Entertainment

The Adventist extends this same attitude to other occupations which might be a greater or less menace to men's bodies or their morals. For example, he does not engage in the manufacture

or distribution of alcohol, narcotics, or even tobacco, because he regards these articles as physically and often morally injurious to man. In the same spirit, his participation in commercialized amusements is very limited. He not only finds himself out of harmony with the atmosphere of night clubs, dance halls, and gambling places of all kinds, but even finds the influence of the theater and the motion-picture house contrary to what he thinks to be humanitarian service.

Adventist Beliefs That Encourage Certain Occupational Activities

The Seventh-Day Adventist is a thorough-going fundamentalist, and, as such, accepts the Bible as the inspired word of God, his infallible guide in all matters of belief and conduct. He therefore defines for himself two supreme principles, basic in every decision he makes. These he finds adequately expressed in the words of Jesus:

Thou shalt love the Lord thy God with all thy heart, and with all thy soul, and with all thy mind. This is the first and great commandment. And the second is like unto it, Thou shalt love thy neighbor as thyself.¹

In his vocational problems, his decision must square with these principles--with this double obligation. The intensity of the Adventist program, in both foreign and home missionary work of all kinds, is a result of this attitude.

To this statement may well be added the further important fact that Adventists interpret the prophecies relative to the second coming of Christ and the end of the world as indicating that conditions now evident in the social, political, and economic world were foretold as descriptive of the conditions which should prevail just prior to the Lord's return. Accordingly, they accept as their supreme duty the preparation of their own lives for that event, and active assistance in helping others make this preparation. If they cannot directly minister to their neighbor's spirit, they desire to minister at least to his physical and mental needs.

The Adventist Philosophy of Education

It does not fall within the scope of this thesis to discuss in detail the educational philosophy of the Seventh-Day

¹Matt. 22: 37-39.

Adventists, but a brief reference is nevertheless necessary in order that the present perplexities that have arisen in the colleges may be understood somewhat in the light of their historical antecedents.

Seventh-Day Adventists find their philosophy of education most fully set forth in the writings of Mrs. E. G. White, three entire volumes¹ of which are devoted to an exposition of this philosophy. In addition, a great many articles by the same writer have appeared in the various Adventist periodicals. Space will be given to but one brief quotation from the first of these volumes:

True education means more than the pursual of a certain course of study. It means more than a preparation for the life that now is. It has to do with the whole being, and with the whole period of existence possible to men. It is the harmonious development of the physical, the mental, and the spiritual powers. It prepares the student for the joy of service in this world, and for the higher joy of wider service in the world to come.²

The specific statements made by this writer concerning the training that should be provided in Adventist educational institutions have recently been summarized by G. M. Mathews in an unpublished Master's thesis.³ Mr. Mathews quotes this sentence from the volume Education: "Every youth, on leaving school, should have acquired a knowledge of some trade or occupation by which, if need be, he may earn a livelihood."⁴

He then goes on to point out that according to the Adventist philosophy of education as stated in the volumes under consideration, the schools should give training for the following occupations: agriculture, manufacturing, home economics, care of the sick, carpentry, printing, bookbinding, blacksmithing, painting, baking, laundering, and mechanical arts.

¹Ellen G. White, Education. Mountain View, California: Pacific Press Publishing Association, 1903. Fundamentals of Christian Education. Nashville, Tennessee: Southern Publishing Association, 1923. Counsels to Teachers. Mountain View, California: Pacific Press Publishing Association, 1903.

²Education, p. 13.

³George Mason Mathews, "Vocational Guidance Program for Seventh-Day Adventist Academies" (Unpublished Master's Thesis, University of Denver, 1935).

⁴White, Education, p. 218.

These statements were written before the days of automobiles and radios, and the specific references to occupations should naturally be interpreted in the light of conditions as they prevail today.

To those unacquainted with Seventh-Day Adventists it may be in order to explain that the extensive writings of Mrs. Ellen G. White have been accepted universally by this denomination as of more than human origin. Opposition to the authority of her writings has never extended beyond an occasional individual or small group, and has never been countenanced in official denominational circles nor in any of the institutions.

The quotations just cited are introduced to point out the large emphasis given in the Adventist philosophy of education to the importance of vocational training in the schools. That the schools were also to train professional workers, especially for the work of the church and its institutions and activities, is evidenced by innumerable passages in these writings.

Almost all of the statements in these writings as to the importance of preparation for non-professional vocations were written before the establishment of the church's present system of secondary schools, and during the time in which the earlier colleges were being founded.

The brief citations quoted here bear on only one phase of the educational philosophy of this religious group. The problem of vocational adjustment in these schools and its relation to the educational philosophy of the church does not require further examination of that literature in this thesis.

Adventist Educational Institutions in North America

Location, Enrollment, and Constituency

Table 1 gives the names and addresses of these institutions and also designates the conference organization that owns and controls each school.

In the Adventist plan of church organization, the various congregations within a state or other similar area are organized into what are known as state or "local" conferences. These in turn are united into so-called "Union Conferences." The territory that comprises each of the ten union conferences in North America is indicated in Figure 1. The location of each of the colleges

TABLE 1
LOCATION AND OWNERSHIP OF ADVENTIST COLLEGES AND PROFESSIONAL SCHOOLS IN NORTH AMERICA

Institution	Location	Controlling Organization
Atlantic Union College	South Lancaster, Mass.	Atlantic Union Conference
Emmanuel Missionary College	Berrien Springs, Mich.	Lake Union Conference
Madison College	Madison College, Tenn.	(Privately Controlled)
Pacific Union College	Angwin, California	Pacific Union Conference
Union College	Lincoln, Nebr.	Central Union Conference
Walla Walla College	College Place, Wash.	North Pacific Union Conference
Washington Missionary College	Takoma Park, D. C.	Columbia Union Conference
Canadian Junior College	Lacombe, Alberta	Canadian Union Conference
Oakwood Junior College	Huntsville, Ala.	General Conference
Oshawa Missionary College	Oshawa, Ontario	Canadian Union Conference
Southern California Junior College	Arlington, California	Pacific Union Conference
Southern Junior College	Collegedale, Tenn.	Southern Union Conference
Southwestern Junior College	Keene, Texas	Southwestern Union Conference
Boulder Sanitarium*	Boulder, Colo.	Central Union Conference
Florida Sanitarium	Orlando, Fla.	Southern Union Conference
Glendale Sanitarium	Glendale, Calif.	Pacific Union Conference
Hinsdale Sanitarium	Hinsdale, Illinois	Lake Union Conference
Loma Linda Sanitarium	Loma Linda, Calif.	General Conference
New England Sanitarium	Melrose, Mass.	Atlantic Union Conference
Paradise Valley Sanitarium	National City, Calif.	Pacific Union Conference
Portland Sanitarium	Portland, Oregon	North Pacific Union Conference
St. Helena Sanitarium	St. Helena, Calif.	Pacific Union Conference
Washington Sanitarium	Takoma Park, D. C.	General Conference
White Memorial Hospital	Los Angeles, Calif.	General Conference
College of Medical Evangelists	Loma Linda & Los Angeles	General Conference
Theological Seminary	Takoma Park, D. C.	General Conference

*Each of these sanitariums operates a nursing school.

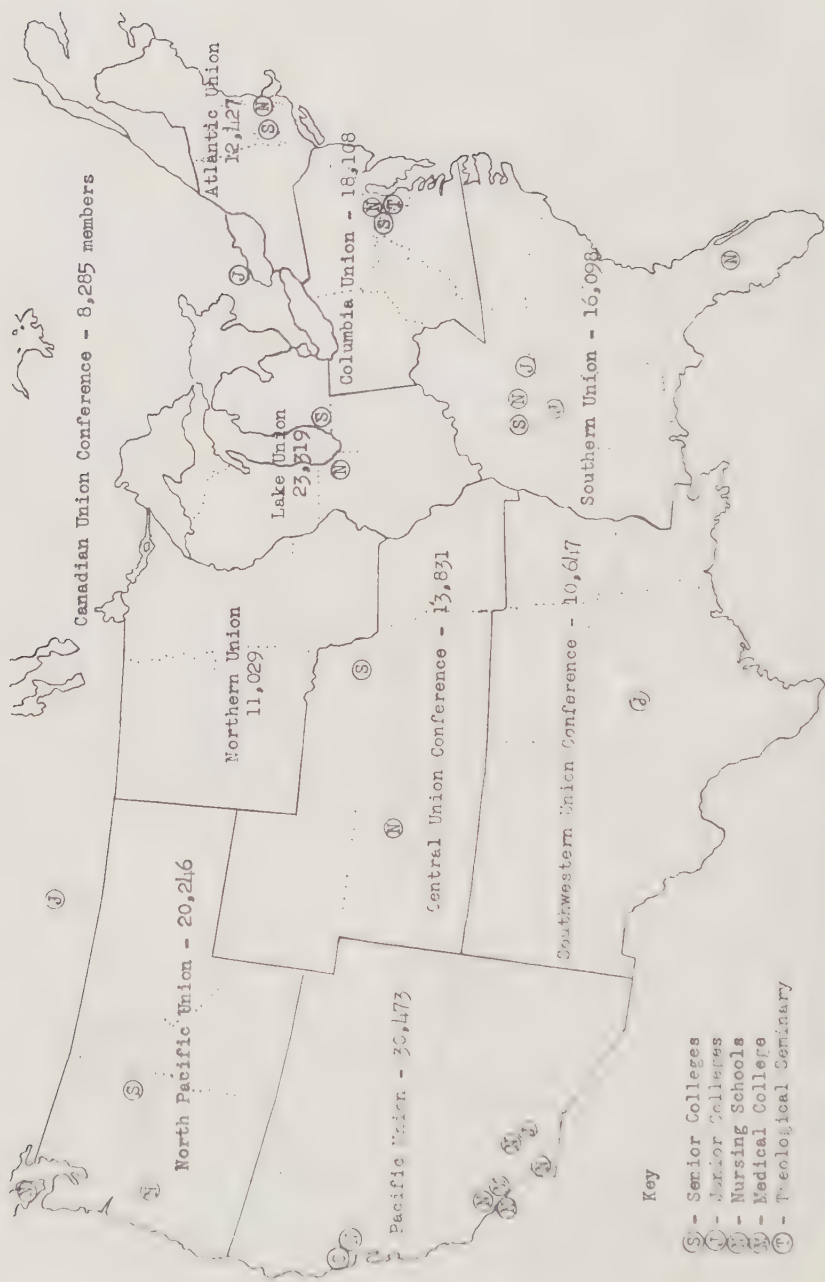


Fig. 1.--Distribution of Adventists by union conferences, and location of colleges and professional schools

and sanitariums is also shown in this figure, and the church membership of each union conference is given.

In general the colleges and sanitariums are owned and supported by the union conference in whose territory they are located, although certain exceptions to this plan occur. The Theological Seminary, the Oakwood Junior College (colored), the College of Medical Evangelists, and three of the sanitariums are owned and controlled by the General Conference. This organization is, as the name implies, the central authority of the Adventist denomination. The creation of a new union conference, or the alteration of the present boundaries of those organizations must be approved by the General Conference at the time of its quadrennial sessions.

Multiplicity of Boards of Control

The plan for general control of the Adventist colleges is undoubtedly related to the problems of vocational training encountered by the students in these institutions. Each college has its own board of trustees and is entirely independent of central denomination control. There is no chief organization with authority to coördinate the work of the different institutions; and thus each school attempts to meet the needs of the youth within its own limited territory to the extent of its vision, its facilities, and its financial strength.

The seven senior colleges are operated by seven distinct boards. Of the six junior colleges, the two Canadian schools are the only schools governed by the same board. In short, twelve separate official bodies of control are attempting to define the objectives and control the policies of the thirteen junion and senior colleges.

The territory from which each college may draw its students is definitely fixed. No junior college is authorized to promote its interests beyond the union conference in which it is located. This rule also governs two of the senior colleges--Pacific Union College and Atlantic Union College. As there is no college in the Northern Union Conference, Union College may draw students from that territory and also has the right to seek students in the Southwestern Union Conference who have had two years of college work. Washington Missionary College may solicit upper division students from the Southern Union Conference. Upper division students living in the western part of Canada may be invited by

Walla Walla College; or, if they reside in the eastern half of the dominion, they may go to Emmanuel Missionary College. The nursing schools, although for the most part controlled by various union conferences, are quite free to draw students from any section of the country.

That it is possible to administer institutions by one board for the entire North American constituency is shown in the case of the medical college and its associated sanitariums and hospitals; but nevertheless, the General Conference has set up three distinct boards to regulate the three educational institutions under its direct care.

Madison College is privately owned and is not bound by conference regulations. This institution, however, accepts almost exclusively students who are entirely self-supporting. Most of these could not be accepted by the other institutions.

The enrollment in these institutions, as of October 15, 1938, is given in Table 2. All the nursing schools listed require a minimum of one year of college work for entrance; the medical school requires a minimum of two years, with a majority of the students having completed three or four years of college work before admittance. The recently established theological seminary, which at present gives but one year of work, requires graduation from a four-year college course as a basis of entrance, except in the case of certain experienced and mature workers who are admitted as special students.

The institutions listed in this table, with a combined enrollment of 4,747 students, are, with the exception of Madison College, owned either by the various union conferences or by the General Conference itself. The Hinsdale Sanitarium, although partially under private ownership, is denominationally controlled and administered. The number of students in denominationally owned and operated academies during the year 1937-38 was 7,729.

In addition to these institutions, there are the school of nursing operated by the Madison Sanitarium, several other independent sanitariums with nursing schools, and a few privately owned Adventist academies. The total enrollment, however, in all these does not exceed one thousand. There is also a privately owned Seventh-Day Adventist school for laboratory technicians, known as the California Institute of Medical Technicians. Statistics for most of these private schools were not readily obtainable.

TABLE 2

S. D. A. HIGHER EDUCATION IN NORTH AMERICA, 1938-39
OPENING ENROLLMENT BY SCHOOLS AND YEARS

Institutions	School years									
	Sp.	13th	14th	15th	16th	17th	18th	19th	20th	Total
Senior Colleges										
Atlantic	21	112	50	44	34	..	..	..	..	261
Emmanuel	8	158	119	64	55	7	..	..	..	411
Pacific Union	18	230	126	101	70	7	..	..	..	552
Union	6	219	88	58	39	..	..	..	..	410
Walla Walla	6	251	130	81	62	..	..	..	..	530
Washington	10	215	113	68	38	..	..	..	..	444
Madison*	..	149	94	63	28	..	..	..	..	334
Total	69	1,334	720	479	326	14	..	..	..	2,942
Junior Colleges										
Canadian	..	22	15	..	..	..	..	..	..	37
Oakwood	..	55	36	..	..	..	..	..	..	91
Oshawa	..	16	5	..	..	..	..	..	..	21
Southern Calif.	..	188	122	..	..	..	..	..	..	310
Southern	6	80	24	..	..	..	..	..	..	110
Southwestern	6	64	31	..	..	..	..	..	..	101
Total	12	425	233	..	..	..	..	..	..	670
Nursing Schools										
Boulder	..	..	12	11	6	..	..	..	..	29
Florida	..	..	12	11	15	..	..	..	..	38
Glendale	..	..	31	21	20	..	..	..	..	72
Hinsdale	..	..	7	13	10	..	..	..	..	30
Loma Linda	..	..	20	21	19	..	..	..	..	60
New England	..	..	17	17	5	..	..	..	..	39
Paradise Valley	..	..	15	13	8	..	..	..	..	36
Portland	..	..	13	21	21	..	..	..	..	55
St. Helena	..	..	14	13	11	..	..	..	..	38
Washington	..	..	30	30	25	..	..	..	..	85
White Memorial	..	..	36	28	29	..	..	..	..	93
Total	..	..	207	199	169	..	..	..	..	575

*Madison College is an Adventist institution, but it is not owned or operated by the official church organization.

TABLE 2 - Continued

Institutions	School Years									
	Sp.	13th	14th	15th	16th	17th	18th	19th	20th	Total
Medical School	..	..	..	..	77	85	85	93	109	449
Medicine	..	..	..	..	7	..	..	..	..	15
Dietetics	..	..	..	8	..	..	..	..	..	..
Laboratory Technicians	..	..	..	6	..	..	..	..	..	6
Total	..	..	..	14	84	85	85	93	109	470
Theological Seminary	..	..	..	..	..	90	..	..	..	90
Grand Total	81	1759	1160	692	579	189	85	93	109	4747

Growth and Ratio of Enrollment to Church Membership

Table 3 shows the membership of the church at three-year intervals from 1877 to 1937. The first Seventh-Day Adventist college was founded in 1874. These statistics, therefore, cover practically the entire period during which the denomination has been engaged in higher education. These data are shown by "rate of growth" curves in Figure 2.

The increase in enrollment from 838 in 1915-16 to 3,612 in 1938-39 in the junior and senior colleges is double that of the growth in church membership--431 per cent increase in enrollment against approximately one-half that much in membership. In the United States as a whole the student enrollment in higher education in 1915 was .41 per cent of the total population. In 1936 this was .94 per cent--that is, 229 per cent of the 1915 ratio. The increase in enrollment in higher education in the Adventist colleges during this period was practically double that of the general increase in the nation.¹

¹Abridged Statistics of Higher Education, 1935-36, p. 7. United States Bureau of Education, Bulletin, 1937, No. 2. Washington: United States Printing Office, 1938.

TABLE 3

GROWTH OF CHURCH MEMBERSHIP FROM 1877 TO 1937, AND OF COLLEGE ENROLLMENTS FROM 1916 TO 1939, AT THREE-YEAR INTERVALS

Years	Church Membership world	Church Membership North America	College Enrollment America ^a
1877	11,708	11,408	..
1880	15,570	14,582	..
1883	17,436	16,715	..
1886	23,111	22,092	..
1889	28,324	25,756	..
1892	33,778	30,036	..
1895	47,680	41,567	..
1898	59,447	49,768	..
1901	69,356	51,916	..
1904	71,891	55,421	..
1907	80,897	58,557	..
1910	90,808	59,060	..
1913	114,557	67,268	..
1916	141,488	79,946	838
1919	178,239	95,645	1,200
1922	208,771	101,129	1,529
1925	250,988	108,802	2,000
1928	285,293	113,737	2,231
1931	336,046	127,787	2,495
1934	404,509	151,216	2,434
1937	452,758	164,490	2,595
1939			3,612 ^b

^aThe statistical reports previous to 1915 do not clearly differentiate between students taking distinctly college work, and those taking secondary work in the academies attached to the colleges.

^bEnrollment on October 15, 1938.

An item of even greater significance in the study of the vocational problems of these Adventist youth is the fact that the present enrollment in Adventist institutions of higher education is unusually high in terms of its relation to the Adventist population of America. A direct comparison may be made as follows: Of the total estimated population of 128,429,000 in the United States in 1936, those in the college-age group, 18 to 21 years,

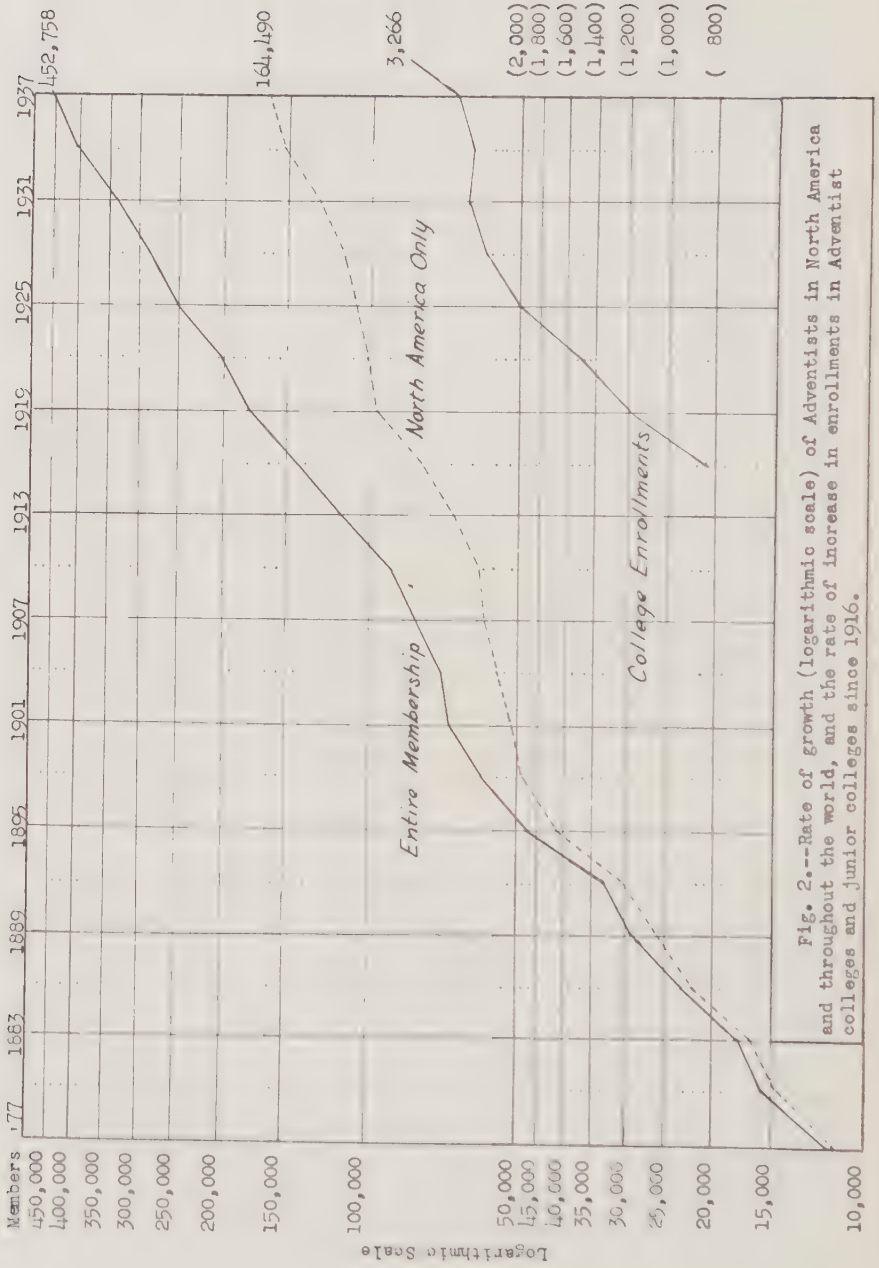


Fig. 2.--Rate of growth (logarithmic scale) of Adventists in North America and throughout the world, and the rate of increase in enrollments in Adventist colleges and junior colleges since 1916.

numbered 9,439,532. The number of students enrolled in all institutions of higher learning in 1936 was 1,208,227 or 12.8 per cent of the number of youth in the college-age group. That is, one student was in college for every 7.8 young people in the college-age group. If one may assume that the proportion of Adventists in each age group corresponds to that of the rest of the population, the number of Adventist youth in North America in the 18-21 age group in 1938 was 17,321.¹ The enrollment of Adventist youth in higher institutions in 1938 was 4,747 or the equivalent of 27.41 per cent of the college-age group, or one student to every 3.7 of the Adventists of the college-age group. This gives a ratio of 214 Adventist youth in college to every 100 in college for the rest of the population.

This calculation is subject to certain limitations. In the first place, the ratio for the United States as a whole is for 1936 and may be slightly different at present. In the second place, the total enrollment in higher education for the Adventist group includes, as a part of the 4,747, 575 students in the nursing schools, whereas, for the United States as a whole, such students would be included only where the nursing school is definitely organized as one of the professional schools of a university. However, in the case of the Adventist nursing schools, no student is accepted who has not completed at least one year of college work with satisfactory grades, and, since the entrance requirements definitely prescribe the subjects that must be taken, such as chemistry, anatomy, and bacteriology, the students of these schools may be considered as engaged in a program of professional training on the college level.

Although the Adventist colleges include a very few students from non-Adventist homes and some students from divided homes where only one parent is a Seventh-Day Adventist, on the other hand, there are not a few Seventh-Day Adventists attending various colleges and universities not connected with the denomination. These various factors seem to offset each other to the extent that the ratio established is reasonably accurate. The Seventh-Day Adventist group, therefore, furnishes twice as many college students proportionately as the general population of the United States.

¹See page 2.

The Educational Program of the Colleges

There is much similarity in the educational opportunities offered by the Adventist colleges. The junior colleges are all very small except one which enrolls some 300 students. The average of the senior college enrollments is about 420, of which only 115 are in the upper two college years.

The institutions were all established in rural districts that training in agriculture might be possible, and all but one continue to operate farms. All the colleges conduct extensive industrial enterprises, the most common being print shops, wood-working shops, bookbinderies, bakeries, dairies, and so on. Furthermore, all maintenance work, office work, library work, janitor work, and repair work is done by students under the direction of the administrative personnel. The earnings by students in these campus activities amount to some \$700,000 annually, or about 50 per cent of all student charges for board, room, and tuition.

The similarity in curriculums is even greater than in the physical features of the institutions. All of the colleges think of themselves as liberal arts and pre-professional institutions. The senior colleges offer almost identical majors--Religion, English, Modern Languages, Chemistry, Biology, Music, Education, and usually Home Economics, Physics, Business Administration, and Mathematics. In one or two cases only a minor is offered in some of these last mentioned departments. Some of the colleges also offer a combined program leading to a degree in nursing education.

All the junior and senior colleges provide two-year curriculums in secretarial training and elementary education. One-year programs are offered for prospective nurses and two- or three-year programs for pre-medical and pre-dental students.

Questions Raised by Adventist Educators

Official denominational publications as a matter of editorial policy have been and still are practically silent as far as any unfavorable criticism of the work of the colleges is concerned. The church has felt that neither students nor support can be attracted in that manner. Only in rather intimate circles have the educators themselves openly questioned the wisdom of the present educational policies of the schools.

The investigator cannot introduce as evidence of the adequacy or inadequacy of the institutions in meeting the changing

needs of the Adventist youth, the statements made to him by various officers and teachers. Some of those most deeply concerned, however, are becoming articulate in a way that makes quotation possible. An Adventist educational convention was held in August, 1937, at Black Mountain, North Carolina, for the purpose of bringing together in conference for the first time in fourteen years the officers and most of the teachers in the higher schools in North America. Most of the papers and addresses presented at this convention have recently been published in book form.¹

In his address on "The Forgotten Man," Dr. E. N. Dick of Union College (Nebraska) presented extensive data in support of his contention that the Adventist colleges were meeting the vocational needs of only a part of those whom they accepted as students. As evidence of this situation, Dick presented statistics showing that during several previous years over 60 per cent of the "Liberal Arts" freshmen in Union College withdrew by the end of their first year.² Similar findings for one of the other colleges were presented by this writer in the same convention.³

No general summary of the questions being raised in regard to the policies of the schools can be cited, for none has been printed. In fairness to those who have registered orally suggestions and criticisms, it may be said that among the questions most often raised, are these:

1. Is student mortality excessive in Adventist institutions? And if so, why?
2. Is mortality especially high among the students of low scholastic ability? And if so, why? And what should be done about it?
3. Should selective admission requirements be used for eliminating those who are the least capable? And if so, what provision, if any, should be made for those rejected?
4. If students of many levels of ability are to continue to enter, what vocational counsel and training should be provided for those of limited scholastic ability?
5. Are not too many preparing for professions in which only a few will find openings?

¹Report of the Blue Ridge Educational Convention: Compiled by the General Conference Department of Education. Washington: General Conference of Seventh-Day Adventists, 1937.

²Ibid., p. 179.

³Ibid., p. 149.

6. Are there not other occupations for which the colleges could provide training that would be especially suitable for those of less scholastic ability?

7. How can counseling be effective when reliable information on all these questions is lacking?

Delimitation of the Problem

Economic conditions have made it very difficult of late for even the graduates of secondary schools to secure suitable employment at once. Under present conditions, youth of eighteen years of age are too young for satisfactory occupational absorption.

Almost all Adventist youth who complete the secondary course in one of the academies plan to enter college. In three comparatively large Adventist academies in which the investigator inquired concerning the vocational plans of each senior, nearly 90 per cent expected to go on to college. Percentages were not calculated in the other academies visited, but according to the teachers' estimates, the proportion is very high. They and their parents think of the college as the "gateway to service," as one of the colleges advertises itself.

These facts suggested that a study of the vocational problems of the Adventist students in college would not only be more simple but more immediately useful than one attempting to deal with the secondary schools also. Data from the academies were obtained only where essential to the study of college problems.

Previous Studies

A preliminary survey of the problem indicated that it would be necessary not only to locate and assemble the data necessary for the study, but also to develop techniques for both the gathering of data and their interpretation. A search for previous studies at all comparable, relating to the problem under consideration, brought out the fact that within the last four years at least five Masters' theses¹ had appeared with discussion of certain

¹Bernard Theodore Anderson, "The History of Vocational Education among Seventh-Day Adventists" (Unpublished Master's thesis, The Catholic University of America, 1938). Mathews, *op. cit.* John Marion Howell, "Unit Costs in Adventist Secondary Schools and Colleges" (Unpublished Master's thesis, University of Nebraska, 1938). Melvin Oss, "An Evaluation of the Education Program Available at the Shelton Academy" (Unpublished Master's

phases of this question. Most of these, however, dealt with problems on the secondary level, and all were limited in their scope.

Another study of Adventist colleges was carried on during the summer of 1935. This was an ambitious project intended to analyze the church's problems of higher education in North America. A commission of fifteen men was appointed by the General Conference at the Spring Council of 1935, and this commission selected a fact-finding committee¹ consisting of five men, who spent the entire summer in visiting colleges and junior colleges, and in assembling data concerning the institutions. Their report contained a wealth of information relative to financial problems faced by the institutions, enrollments, the size of classes, number of graduates, and so forth, but it avoided the problems that are the subject of this investigation.

A search was made for similar studies that might have been undertaken for other population groups. Those located, however, had objectives so different from those of the present study that they were of slight use. The study that came the closest to this problem was that of Edward J. Sparling.² In Sparling's study of the students of Long Island University, he made an appraisal of the suitability of their choices in terms of their abilities, interests, and the probable opportunities in the occupations of their choices. To this extent, his study was comparable and helpful. However, Sparling's study was limited very largely to pointing out the inadequacies of the choices being made. He did not attempt to study the problem which is the main burden of this investigation, namely, to ascertain the occupations that the students under consideration should plan to enter, and to appraise their choices from that standpoint. The students of Long Island University were not confronted by definitely restricted occupational opportunities resulting from their religious convictions, as are the Adventist students.

thesis, University of Nebraska, 1937). Conard N. Rees, "A Guidance Program for Shenandoah Valley Academy" (Unpublished Master's thesis, University of Nebraska, 1937).

¹Report of the Fact-finding Committee Appointed by the Educational Survey Commission to Make an Examination of the Seventh-Day Adventist Colleges in North America. Compiled by the General Conference of Seventh-Day Adventists. Washington: General Conference of Seventh-Day Adventists, 1935.

²Do College Students Choose Vocations Wisely? New York: Teachers College, Columbia University, 1933.

Sparling's study proved interesting and suggestive. While the data were not applicable, certain of the techniques could be used in part, especially those concerned with the evaluation of students' choices in terms of their scholastic ability.

It was found that the Adventist colleges themselves had given very little study to this problem. Almost without exception, they had assumed that they were training people for the professions and for clerical positions such as accounting and secretarial work. Consequently, their study of the occupational adjustment of their students has been limited almost entirely to whether or not their graduates were placed--ignoring the fact that only a comparatively small number of those who entered as freshmen were being graduated.

Objectives of the Study and Anticipated Values

Some of the objectives were immediate because they were necessary factors in the development of the study itself. But constantly in the background were the larger and more important objectives, designated in this study as "eventual objectives."

Immediate Objectives

The first, and in some respects the most pressing, of the immediate objectives was to determine the occupations which are the most suitable for Adventists. Since there existed no technique for such an evaluation, it became necessary to set up criteria for the identification of suitable occupations.

The second immediate objective was to discover the pattern of the occupational choices being made by Seventh-Day Adventist students, together with such other information as the scholastic ability of students choosing various occupations.

Finally the most important immediate objective was to evaluate the occupational choices being made by Seventh-Day Adventist students in terms of (a) the consistency of the choices being made, in view of the religious beliefs and attitudes of Seventh-Day Adventists and the church's needs in its various activities; (b) the probability of there being sufficient openings in the occupations chosen; and (c) the suitability of the occupations from the viewpoint of the students' capacity to complete the preparation for, and to succeed in, the work chosen.

Eventual Objectives

The immediate objectives seemed important and worthwhile in themselves, but it was nevertheless thought that more important and enduring values would result from the study. It was believed that the study would provide for the following: (a) a scientific approach to the problem of vocational guidance for Seventh-Day Adventist students and a basis for the construction of an orientation and guidance program within the several institutions; (b) a basis for the evaluation of the curriculums now being offered by the institutions and for determining the advisability of introducing others; (c) a procedure for the study and clarification of both the general and specific objectives of the institutions themselves; and, more far-reaching than any of the others, (d) the basis for an inquiry into the objectives of the denomination itself in the field of higher and professional education in North America. It was felt that this approach by the General Conference itself, as a representative of the interests of the entire constituency in North America, might lead to a critical study of the present plan of providing for occupational training, with the possible result that a much more satisfactory and economical program might be evolved.

The Method of Approach

The problem naturally divided itself into two parts and the search for essential data was undertaken by seeking the answers to the following questions: (1) As to the occupational opportunities open to Seventh-Day Adventists: (a) In what respects and for what reasons are the occupational opportunities open to Adventist youth different from those open to youth in general? (b) In the light of their limitations, what are the occupational positions that Adventist youth may reasonably expect to enter? (c) Of the possible opportunities, which are the most desirable? How may these occupations be identified? What criteria can be set up for the selection of these occupations? (d) Empirically, what has been the experience of Seventh-Day Adventists in occupations? What do they do? In which occupations are they the most successful? In which the least so?

(2) In regard to the vocational choices being made by Seventh-Day Adventist youth: (a) What are the occupations that Seventh-Day Adventist youth, especially those in the colleges,

expect to enter? (b) Are they choosing occupations that are suitable in view of the limitations that the preceding criteria suggest? (c) Are they choosing occupations that are not unusually overcrowded, and into which entrance would not be exceedingly difficult? (d) Are they choosing occupations in harmony with their abilities? (e) What factors enter into and influence the choices they are now making?

CHAPTER II

OCCUPATIONAL OPPORTUNITIES FOR SEVENTH-DAY ADVENTIST STUDENTS IN THE WORK OF THE CHURCH

Attitude of Adventists toward Employment by the Denomination

When the first Seventh-Day Adventist college was founded in Battle Creek, Michigan, in 1874, there was no confusion in the minds of parents, students, teachers, or the board of trustees, as to the purpose of the institution. The growing church at that time numbered nearly ten thousand members. Several of the congregations were comparatively large. The publishing and medical departments were swinging into action with considerable vigor. On every hand, the supreme denominational need was for trained workers.

The leaders of the church had already found that sending their students to other colleges and universities was proving unsatisfactory. While Adventist students in other institutions could obtain adequate instruction in the materials that commonly composed the curriculums of those days, they nevertheless returned ignorant of both the spirit and objectives of the Adventist church. In fact, not a few of them, before or by the end of their college career, yielded to the temptation to accept positions that promised considerably more financial reward and social recognition than any the denomination had to offer.

Another reason for the establishing of Battle Creek College was that the church, largely through the leadership of Mrs. Ellen G. White, had developed a definite educational philosophy of its own. The leaders felt that only in institutions where this philosophy of education prevailed could workers with the proper vision and spirit be trained.

Higher education with Seventh-Day Adventists began then with the avowed and almost exclusive purpose of training ministers, missionaries, and other classes of religious workers for the home and foreign fields. The test of whether or not a student in an

Adventist college had profited by his attendance was whether or not he became a denominational worker. A change is taking place, however, and this traditional attitude is in the process of definite modification, although the official publications of the denomination and of the several colleges intentionally or unintentionally avoid discussion of this subject.

That the denomination had very clear ideas as to what constituted "general education" on the one hand and "professional education" on the other hand is not apparent. However, the denomination did have a strong conviction that a few years of attendance at its institutions would greatly increase the effectiveness of a prospective worker.

Survey of Openings in Denominational Work

Since denominational employment has been, and still is, the goal of the large majority of Adventist students, it was deemed of primary importance to take an inventory of the opportunities which the denomination itself offers to its youth. The investigator was disappointed to find that apparently no one in the church had ever seriously inquired as to the extent of these opportunities. The colleges have been encouraging the youth to prepare themselves as ministers, Bible workers, missionaries, church-school teachers, academy teachers, secretaries, treasurers, nurses, doctors, etc. But none of the schools, so far as could be ascertained, has ever attempted to discover just how many persons can be used in these different lines. That too many or too few people were preparing themselves for certain lines has been evident from time to time, and sometimes the pendulum has swung in the direction of encouraging or discouraging students as to their choice among the different denominational activities. Apparently this has been done with practically no factual information as a basis for the counsel given.

The investigator, therefore, attempted to secure definite objective data on these points. This was not possible in every case, but in most instances it was possible to obtain data sufficiently accurate for the purpose of the investigation.

The statistical secretary of the General Conference publishes each year the number of persons employed by the denomination in such activities as the medical, educational, evangelical, and publishing work, but it was found that these figures were of

limited value as to their occupational implications. For example, to know that the denomination employs 3,300 people in medical and health work means practically nothing to either the colleges or the students until an analysis is made of what these 3,300 individuals do and of the number of openings occurring in each occupation represented.

This was done in the case of health work first by using the information available in the statistical department and the medical department of the General Conference, and then by making an analysis within certain of the institutions themselves. One of the largest sanitariums, with 350 employees, was studied in detail. The nature of the work of every one of these individuals was ascertained and the entire group properly classified. Where detailed information was not available for certain other sanitariums and hospitals, it was assumed that the distribution of employees followed the same pattern as that of institutions analyzed, and in that way it was possible to classify the 3,300 medical workers in their appropriate occupations. This assumption obviously introduces a margin of error, but a detailed study of the occupational distribution of the employees in every one of these institutions did not seem practicable or imperative for the purposes of this study.

The same technique was applied to the employees of the publishing houses, except that in the case of these enterprises, detailed information was available for the three largest institutions, which represented a large majority of all those engaged in this activity. Those employed in educational work were studied in the same way, and also the evangelical and other workers. This kind of analysis made it possible to discover the number of employees in occupations requiring various amounts and kinds of education.

The number of employees in each category, however, failed to indicate the annual opportunities in these occupations. This suggested the necessity of ascertaining the number of openings that would develop annually within the denomination for each class of employees.

Table 4¹ indicates that at present there are approximately

¹This table is introduced at this point to give an overview of the extent of opportunities for employment within the denomination. The sources of these data will be indicated in the various sections of this chapter.

TABLE 4

SUMMARY OF EMPLOYMENT BY THE DENOMINATION, AND OPENINGS
ANNUALLY FOR COLLEGE TRAINED WORKERS

Occupations	Total Positions	Positions Requiring Some College Training			
		Total	Openings Per Year		
			Men	Women	Total
Sanitarium Employees					
Physicians	113	113	60	7	75 ^a
Graduate nurses.	858	858	-	-	-
Student nurses	791 ^b	575	17	210	227 ^c
Technicians -x-ray, lab., etc	169	169	11	1	12
Business officers.	47	47	2	-	2
Clerical workers	87	87	11	8	19
Hostesses, preceptresses, etc	47	47	-	3	3
Information, Desk, and Elevator Service	101	-	-	-	-
Pharmacy, Store, and Bakery. Dietitians, cooks, and helpers.	75	30	1	-	1
Maintenance: -engineers, repair men, etc.	145	30	-	3	3
Housekeepers	170	30	-	1	1
Laundry workers.	111	-	-	-	-
Watchmen, etc.	18	-	-	-	-
Total.	1,800	1,800	90	231	321
Publishing House Employees					
Managers and promoters . . .	10	10	1	-	1
Treasurers and accountants .	17	17	1	-	1
Editors.	10	10	1	-	1
Librarians	2	2	-	-	-
Proof-readers, copy holders.	20	20	1	3	4
Stenographers, secretaries .	30	30	-	2	2
Clerks	10	10	-	-	-
Printers -pressmen, etc. . .	10	10	-	-	-
Engineers, truck drivers, etc	10	10	-	-	-
General help, -bindery (Women) etc.	11	11	-	-	-
Artists.	11	11	1	-	1
Total.	100	100	5	5	10

TABLE 4 - Continued

Occupations	Total Positions	Positions Requiring Some College Training			
		Total	Openings Per Year		
			Men	Women	Total
Educational Employees					
College and Academy teachers.	800	800	20	20	40
Church School teachers. . . .	1,100	1,100	25	200	225 ^d
Total	1,900	1,900	45	220	265
Conference Employees					
Ministers	1,341	1,341	45	-	45
Bible workers	100 ^e	100	-	10	10
Auditors, treasurers, and accountants	120	120	4	-	4
Stenographers, secretaries. . .	300	300	3	40	43
Total	1,861	1,861	52	50	102
Miscellaneous Employees					
Colporteurs.	900	-	-	-	-
Food factory, temporary, and part-time workers.	902 ^f	-	-	-	-
Total.	1,802	-	-	-	-
Recapitulation					
Sanitarium Employees	3,300	1,956	94	234	328
Publishing House Employees .	568	176	5	9	14
Educational Employees. . . .	1,900	1,900	45	220	265
Conference Employees	1,861	1,861	52	50	102
Miscellaneous Employees. . .	1,802	-	-	-	-
Total.	9,431 ^f	5,893	196	513	709

TABLE 4 - Continued

^a The number of students accepted annually by the College of Medical Evangelists.

^b This includes some 216 student nurses in private Seventh-day Adventist sanitariums and hospitals not requiring college training.

^c The maximum number of freshmen accepted annually in the official Seventh-day Adventist nursing schools.

^d These are the estimated totals of actual "new" openings for college trained people into denominational work. The number beginning teaching in these lines for the first time each year is larger for the reason that many transfers are made from one line to another.

^e This estimate was made by the Associate Secretary of the Ministerial Association of the Seventh-day Adventist Denomination.

^f The exact number of these employees could not be verified. This is an estimate inferred from the official statistical report for December 31, 1937 which gives the total number of denominational employees as 10,167.

^g This total is 736 less than that given in the official statistical report, which includes 736 physicians engaged largely in private practice.

seven hundred openings each year for young people with some college training. This represents approximately 50 per cent of the number of entering freshmen each year. That is, about half of those who enter the colleges each year as freshmen can expect employment under the present conditions by the denomination itself. If the managers of the sanitariums, hospitals, and publishing houses were to require the completion of at least a two-year college curriculum as a basis for employment in any line, naturally the number of opportunities in the denomination for college-trained people would greatly increase. The fact still remains, however, that people are employed as printers, maintenance men, and the like, not because they have had two or more years in college, but because they are competent in their specialized line.

The Ministry and Associated Activities

One of the problems of the investigation was that of establishing the number of opportunities each year for those who have prepared themselves for the ministry, since there was no an-

swer to this question in any of the General Conference offices. Two methods were used for securing data regarding these workers.

One of these procedures was an examination of the official ministerial directory as it appears each year in the Seventh-Day Adventist Year Book. Every ordained and licensed minister whose residence was indicated as being in one of the North American conferences was listed for the year 1928 and at two-year intervals until 1938 inclusive. Table 5 gives the data yielded by this study. The table shows that on the average, 96.4 new names were added annually to the list during this period. The number dropped from 119.5 during the first two-year period to 72 during the second two-year period. Since then the number has been rising until an average of 111 was added during each of the last two years.

TABLE 5
ORDAINED AND LICENSED MINISTERS EMPLOYED IN
NORTH AMERICA, 1928 TO 1938, COMPILED
AT TWO-YEAR INTERVALS

Periods	Names Listed at Beginning of Each Period	Names Transferred or Dropped During Each Period	Names Added During Each Period*	Average Number Added Annually
1928-'30	1,282	192	239	119.5
1930-'32	1,329	182	144	72.0
1932-'34	1,291	165	158	79.0
1934-'36	1,284	144	201	100.5
1936-'38	1,341	125	222	111.0
Totals		808	964	96.4

*These numbers include: (a) young ministers just beginning their work, (b) missionaries returning from foreign lands, and (c) such educational and other workers as were licensed or ordained during each period.

This procedure indicated the number who annually entered ministerial work in North America, but it failed to distinguish between those who were entering directly from the schools and those who were transferring from other lines of work or returning from other parts of the world to America.

The possibility of improving this method by a study of the numbers that have been employed in recent years through what is known as the Ministerial Internship Plan suggested itself.

This is an arrangement whereby the General Conference assists local conferences to give the graduates of the theological departments of the colleges an opportunity to prove their ability in ministerial service. The arrangement, as it stands at present, provides for two-thirds of the interne's salary to be paid by the General Conference during the first year, and one-third during the second year. This seemed to be a rather reliable index as to the number of new recruits to the ministry which were annually being employed.

The data yielded by a study of the internship plan as it has been in operation now for several years indicate that at present the denomination is employing about forty-two new ministers each year by this method.¹ A few are employed who do not qualify for the benefits of the internship plan. On the other hand, a few of those employed on the internship plan are not continued further than one or two years. These factors are not large and they tend to offset each other. Those in charge of the administration of the internship plan estimate that the number of young men annually employed in the ministry directly from the schools is about forty-five at the present time.

A discouraging feature to the young men in the college theological departments in the past has been that occasionally conferences have employed individuals with only one or two years of college training, while at the same time, some who had completed the four-year (undergraduate) theological curriculum were experiencing difficulty in finding positions. This situation, however, is rapidly changing.

Bible Workers

A few young women are employed each year as assistants to pastors in their house-to-house visitations; these are called "Bible workers." The total number employed in this field is not known. The statistical summary includes these assistants as "missionary licentiates," along with several other classes of workers. The Associate Secretary of the Ministerial Association of Seventh-Day Adventists, L. E. Froom,² has estimated the number at 100.

¹Data supplied by H. T. Elliott, associate secretary of the General Conference of Seventh-Day Adventists.

²In a personal interview.

This line of work has not offered many permanent positions to young women for the reason that their work has seldom been considered by the conferences as a real profession. In many cases, church-school teachers, nurses, wives of ministers, and persons with various types of preparation and previous experience, have been assigned to this kind of work. Again, when funds are low in a local conference, these are usually the first workers to be assigned to other positions. The number of fully trained, efficient Bible workers who are given permanent employment and professional recognition is still so small that it cannot be regarded by students as offering opportunity to more than a very limited number of young women each year. An investigation of the length of service of a number of these persons suggested that their average tenure of service is about ten years. The number of openings occurring each year would, therefore, be not more than eight or ten.

Missionaries

Table 4 omits entirely "foreign mission service" as an occupation open to Seventh-Day Adventist students. The investigator recognizes, however, that not only the laity but also most of the ministers and teachers continue to think and speak of foreign service as not only the highest type of work, but as a field of endeavor demanding the services of a large number of graduates each year. This problem was studied with some care and the facts may be summarized as follows:

1. In 1875, one year after the oldest Adventist college was founded, the church sent out its first foreign missionary. The number of missionaries sent out annually increased almost continuously until 1920, when it reached a total of 320 for that year.¹
2. During the earlier years all the missionaries were sent from the United States, but by 1920 a number were going from Europe and Australasia.
3. Until about 1920, not much specialization was required. One went as a "foreign missionary," and he might be assigned to evangelical work, to teaching, to institutional

¹Year Book of the Seventh-Day Adventist Denomination, 1939, p. 356.

institutional administration, or to the promotion of any one of several lines of church activity in the field to which he went.

4. This picture has almost completely changed during the last two decades. By 1920, the denomination not only had established a number of training schools in various countries, but had definitely, though rather unconsciously, adopted a new philosophy in the manning of its foreign fields. The schools established in the various language areas assumed the responsibility for training the nationals and each foreign field began to train its own teachers, office workers, and evangelical workers of all kinds. In many places, sanitariums had been established and the training of nurses was started.

And so, within less than two decades, the youth of North America have found that instead of over one hundred being called each year to service in foreign fields, very few inexperienced young people are now sent across the seas.

The report, "Outgoing Missionaries of 1937,"¹ of the Secretary of the General Conference, gives the number of foreign missionaries sent out that year by the denomination as 137. An examination of the list, however, indicates in the first place that a little more than half (72) were sent from the other countries which have now become "home bases." These include Australia, several of the European countries, South Africa, and South America. Of the 65 individuals who were sent from North America, 21 were either physicians or the wives of physicians. Several were nurses, teachers, and secretaries. Still others were experienced men, some of whom had served the church for 20 years or more, who were sent out to handle important administrative positions in various foreign divisions. The number of youth just out of college was almost negligible.

The situation may be summarized by saying that at present, an Adventist youth in North America who desires to enter foreign service should prepare for a definite vocation and should start work in this country, and that the possibility of his being sent to a foreign field will depend, among other things, upon his first making a success of his specialized line of work at home.

¹A. W. Cormack, Review and Herald, pp. 15-16. February 24, 1938.

Opportunities for Physicians and Other
Medical Workers

The Battle Creek Sanitarium was a thriving institution before the first Adventist college was established, and the denomination was already much interested in its health program. In fact, it is customary in church circles to refer to the medical work as "the right arm of the Gospel." Wherever the Adventists have extended their work in foreign fields, one of their first objectives has been to establish their health program. If impossible to build a sanitarium immediately, some other effort is made--a clinic of some kind, or treatment rooms--according to the funds and personnel available. It is natural then that the young people of the denomination should aspire in large numbers toward the medical work.

Table 4 shows that in the United States alone, some 3,300 workers are connected with this department. In addition to this number there are, at the present time, more than eight hundred¹ Adventist physicians and perhaps twice that many graduate nurses who, although not on the denominational payrolls, are said to devote a considerable part of their time toward the advancement of what they term "medical missionary work."

Physicians

The number of openings for physicians is not governed by the number of opportunities in sanitariums and hospitals, but rather by the capacity of the denominational medical school (The College of Medical Evangelists) to accept students. For some years that institution, yielding to the insistence of students, parents, and the Adventist colleges, has been accepting over 100 students annually. Some of the graduating classes number up to 110.

Two circumstances, however, have recently led the medical school to reduce the size of its freshman classes. One of these is the present well known attitude of the medical profession which holds that the present ratio of physicians to population--

¹The official statistical report of December 31, 1937, indicated 736 physicians in this relationship to the church. Since then there have been nearly 200 additional Adventist physicians graduated by the College of Medical Evangelists.

The Schools of Nursing have supplied some 200 graduates annually for a number of years, but only those in the direct employ of the sanitariums are listed in Table 3.

approximately one doctor to 767 of the population--is out of proportion to the actual capacity of this country to use medical service. It is pointed out that in certain European countries the number of persons per physician is much higher.¹ In Great Britain the ratio of population to physician is 1,069; in Germany, 1,307; in Denmark, 1,346; in France, 1,596; and in Sweden, 2,660. In the light of these facts, the American Medical Association has very definitely urged all medical schools to accept a smaller number of applicants annually.

The other factor is the increasing cost of medical education, which is said to result from the changes taking place in the aims and methods of medical education. That the newer methods call for extensive increases in not only teaching personnel, but also equipment, buildings, and teaching materials, is no longer questioned by the church. This increased cost cannot, apparently, be placed entirely on the students, and in the absence of adequate endowment, the church has indicated limits to its ability to assume additional responsibility.

In view of this situation, the College of Medical Evangelists is at the present time accepting but 75 freshmen annually. There is no evidence that indicates the school will accept more students in the immediate future. It seems clear, then, that the number of students who can reasonably expect to study medicine at the denominational medical college is definitely established.

This discussion has assumed that Adventist medical students must necessarily attend the Adventist Medical College. It is true that a few do study in other institutions, but the plan is not entirely satisfactory. One of the chief difficulties is that these students usually find themselves in more or less serious and continuous perplexity concerning Saturday requirements. Another problem is that the Adventist philosophy of medical care is somewhat unique in that it anticipates much less use of drugs than is true of the more typical institution.

Nursing

Table 2 (page 11) indicates the number of first, second, and third year students in the 11 denominationally operated nursing

¹Factual Data on Medical Economics, 1939, p. 17. Bureau of Medical Economics. Chicago: American Medical Association.

schools. The maximum number of freshman student nurses which these institutions can accept annually is 225. The fact that only 575 are now in attendance is evidence that there is some student mortality, and that occasionally the maximum number is not accepted. Since the schools have been requiring one year of college work as a prerequisite, and rather difficult science courses are prescribed, such as anatomy, chemistry, and bacteriology, the number of fully prepared applicants available each year has made it impossible for the institutions always to accept their full quotas.

Some of the sanitariums make a practice of taking male students up to 10 per cent of the class. The White Memorial Hospital and the Loma Linda Sanitarium accept no male students, and so not more than 15 young men each year should be encouraged to plan for entrance in one of the official nursing schools. The various privately owned sanitariums and hospitals are not obliged to require the pre-nursing course, and so are more flexible in their entrance requirements. Very few data concerning these institutions are gathered by the denomination. The estimate of approximately 216 young people in training at the present time in these institutions includes some students who are not in a formal program of instruction but whose work is that of "nursing aides," "orderlies," etc. Such private institutions as the Madison Rural Sanitarium and Hospital (Tennessee), and the Asheville Mountain Sanitarium and Hospital (North Carolina) are examples of the stronger schools with well organized programs. This investigation is concerned primarily with the young people who enter the senior and junior colleges, and the number of openings in this field for which some college training is required can be placed at 225.

Other Medical Occupations

In order to ascertain the number of opportunities for college-trained workers, aside from nurses and physicians, in medical institutions, it was necessary to determine the approximate distribution of different classes of employees in the various sanitariums. This is shown in Table 6.

A representative sanitarium and hospital which employs 350 individuals, known in the table as Sanitarium "A," was chosen because its various services and features were represented in typical proportions. For example, the relationship of surgical

TABLE 6

NUMBER AND DISTRIBUTION OF EMPLOYEES IN ADVENTIST SANITARIUMS AND HOSPITALS IN NORTH AMERICA, DECEMBER 31, 1937

Distribution	Sanitarium "A"		Other Institutions		
	No.	Per Cent	Church	Private	All
Medical					
Physicians and Internes	12	3.43	75	26	113
Graduate Nurses, including Superintendents, Supervisors, etc..	91	26.00	569	198	858
Technicians -Laboratory, X-ray, Hydrotherapy, Physical Therapy, etc..	18	5.14	112	39	169
Student Nurses.	84	24.00	524	183	791
Business and Auxiliary					
Business officers, including Purchasing Agents	5	1.43	31	11	47
Clerical -Accountants, Stenographers, and Clerks.	9	2.58	57	21	87
Hostesses, Preceptresses, and Chaplains	5	1.43	31	11	47
Information, Desk, and Elevator Service	20	5.71	126	45	191
Pharmacy, Store, and Bakery	8	2.28	50	17	75
Culinary -Cooks and Helpers	47	13.43	294	102	443
Maintenance -Engineers, Repair men, etc	18	5.14	112	39	169
Housekeepers.	19	5.43	118	41	178
Laundry Workers	12	3.43	76	26	114
Watchmen, etc..	21	6.57	12	4	18
Totals.	350	100.00	2,177	783	2,960

^aSanitarium "A" was chosen for analysis as being typical of the occupational distribution of employees in all the sanitariums and hospitals.

cases to medical cases was normal. It had operated very near capacity for many years and its nursing school was well established and successful. The employees in other sanitariums and hospitals, both church-owned and private, it is believed, were distributed in approximately the same proportion in the various lines of activity as those in Sanitarium "A."

Table 4 (page 26) shows that aside from physicians and nurses, the sanitariums employ a rather limited number of individuals for whom college education is required. There are approximately 170 technicians of different kinds. In addition to laboratory and X-ray technicians, this includes those who direct the hydro-therapy service, physical therapy, and so forth. These individuals have not been required in the past to have college training. At present, most of them have at least two years of college work before taking up their specialized training. This is especially true of the laboratory technicians, business officers, clerical workers, hostesses, and preceptresses. All represent positions which, while not all are filled at present by college-trained individuals, will in the future represent almost exclusively persons with at least that grade of education.

This table is not to be interpreted as indicating that employees in other lines of work would not benefit by at least two years of general education in college, or by specialized training; the table simply indicates that at present the administrators of these institutions are not insisting that persons for these positions have college training.

The Publishing-House Employees

Definite information was obtained in regard to the work of every employee in the three largest of the Adventist publishing houses, which together represent 309 persons, or more than one-half of all of this group of denominational employees in North America. It has been assumed that the remaining 259 are distributed among the different activities in the same ratio as is true in the three largest publishing houses.

Table 7 indicates this distribution in the three largest publishing houses and the assumed distribution for the others. It may be inferred from Table 4 (page 26) that, although 568 persons are employed by these houses, only a small number of college-trained people can be certain of openings. In fact, with the exception of the few new stenographers, secretaries, and proof-readers, a total of 10 annually, there are no openings into which young people may expect to go directly from college unless they have had some special training.

These publishing houses employ 185 skilled printers--pressmen, compositors, linotype operators, binder men, etc.--but

TABLE 7

DENOMINATIONAL PUBLISHING HOUSE EMPLOYEES AS OF OCTOBER, 1938
CLASSIFIED ACCORDING TO THEIR OCCUPATIONS

Occupations	House A	House B	House C	Misc. Houses	Total
Managers and Promoters.	10	9	3	18	40
Treasurers and Accountants.	4	3	2	8	17
Editors	7	6	2	13	28
Librarians.	1	1	-	-	2
Proof-readers and Copy-holders.	5	8	2	13	28
Artists	1	4	1	5	11
Stenographers and Secretaries	11	12	4	23	50
Clerks.	3	25	2	23	53
Skilled Printers.	46	40	14	85	185
Engineers, Truck Drivers, Janitors, etc.	10	6	4	18	38
General Help, Bindery (Women)	34	21	8	53	116
Total	132	135	42	259	568

these men are employed on the basis of their skill in some particular trade rather than the fact that they are college graduates or even that they have attended college. In the case of editors, accountants, managers, and promoters, the very limited number of new positions open annually is filled by persons who have demonstrated their ability in these lines in other positions. It must be concluded, then, that the publishing houses of the denomination offer few opportunities at present for college-trained people.

On the other hand, it should be noted that the conditions of service in these houses appear to be unusually satisfactory to the employees. The length of time that each employee had served the institution was ascertained in the case of all employees in the three largest publishing houses. These data indicated that the median employee had already been connected with the institution where he now works for eleven years, in spite of the fact that in all institutions there were temporary workers who had been taken on for periods of less than one year. There seems to be no other branch of denominational service in which individuals remain so long with one organization as they do with the publishing houses. In one of these houses, the average length of service was estimated as in excess of twenty-five years, notwithstanding

the fact that many of the employees had worked for other denominational organizations before they entered this publishing house. So, while the number of opportunities is limited, the conditions surrounding this type of employment are found to be relatively satisfactory.

Opportunities in the Teaching Profession

Church-School Teachers

One of the largest groups of teachers is represented by those in the parochial schools, known within the denomination as "church school teachers." The statistical report indicates the total number employed in this line from year to year, but gives no clue whatever as to the average length of service, and accordingly, nothing as to the number of new teachers that are annually needed. To obtain this information, it was necessary to study each individual teacher separately. Accordingly, an index card was made for each of the 4,189 individuals who had been employed in this line of work during the eleven school years from 1927-28 to 1937-38. This information was obtained from the annual editions of the official Seventh-Day Adventist Year Book, in which each conference annually lists its church-school teachers. An entry was made on each card of the listings, and, after this work was completed, a study was made of the length of service of each teacher.

There were at least two possibilities of error in this method, but neither was considered serious. In the first place, the Year Book listings of teachers by conferences were no more accurate than were the reports made to the statistical secretary by the conference secretaries, and so, of course, there was always the possibility of some slight error. It was believed, however, that this error was very small. Again it was recognized that each year some of the teachers married, and that some of the conferences, instead of listing Mary Jones, a former teacher, as Mary Jones-Smith, would list such a teacher as Mrs. J. C. Smith, and in this way undoubtedly the number of individual names may have become slightly exaggerated.

This procedure made it possible to ascertain the number of new teachers employed each year in the United States and Canada. The entire North American field was treated as one school system,

so that even though a teacher taught each year in a different conference, she was not considered as a new teacher.

Table 8 shows that in 1927-28 there were 904 of these teachers employed. This number varied somewhat from year to year, reaching a total of 1,083 in 1935-36, decreasing to 1,028 in 1937-38. This table also indicates the number of men and of women who were employed for the first time during each of the ten years from 1928-29 to 1937-38. Figure 3 suggests that the number of new teachers employed is affected, to some extent, by economic conditions.

TABLE 8
SUMMARY OF EMPLOYMENT OF CHURCH-SCHOOL TEACHERS
UNITED STATES AND CANADA^a

School Years	New Teachers Employed			Former Teachers Retained	Total Teachers Employed	Teachers Who Withdrew
	Men	Women	Total			
1927-28	..	..	..	..	904	404
1928-29	61	392	453	500	953 ^b	395
1929-30	72	318	390	558	948	395
1930-31	65	257	322	580	922	300
1931-32	63	254	317	602	919	238
1932-33	70	172	242	681	923	217
1933-34	82	206	288	706	994	250
1934-35	66	251	317	744	1,061	292
1935-36	65	249	314	769	1,083	338
1936-37	53	258	311	745	1,056	359
1937-38	52	259	311	697	1,028	...
Totals	649	2,616	3,265	6,582	10,791	3,161
Averages	64.9	261.6	326.5	658.2	981	316.1

^aAll church schools in this territory are considered as constituting one school system. Transferring from one school to another is considered as retention.

^bIn 1927-28 there were 163 men and 741 women teachers.

Since the total number of teachers employed throughout the depression declined only slightly and began to increase by 1932-33, it may be inferred that the reason why so few new teachers were employed during the middle of this period is that there were fewer opportunities for teachers to change to other types of work than was true in prosperous years. Table 9 indicates that of the 4,189 who were employed during this period, 1,903, or 45.4

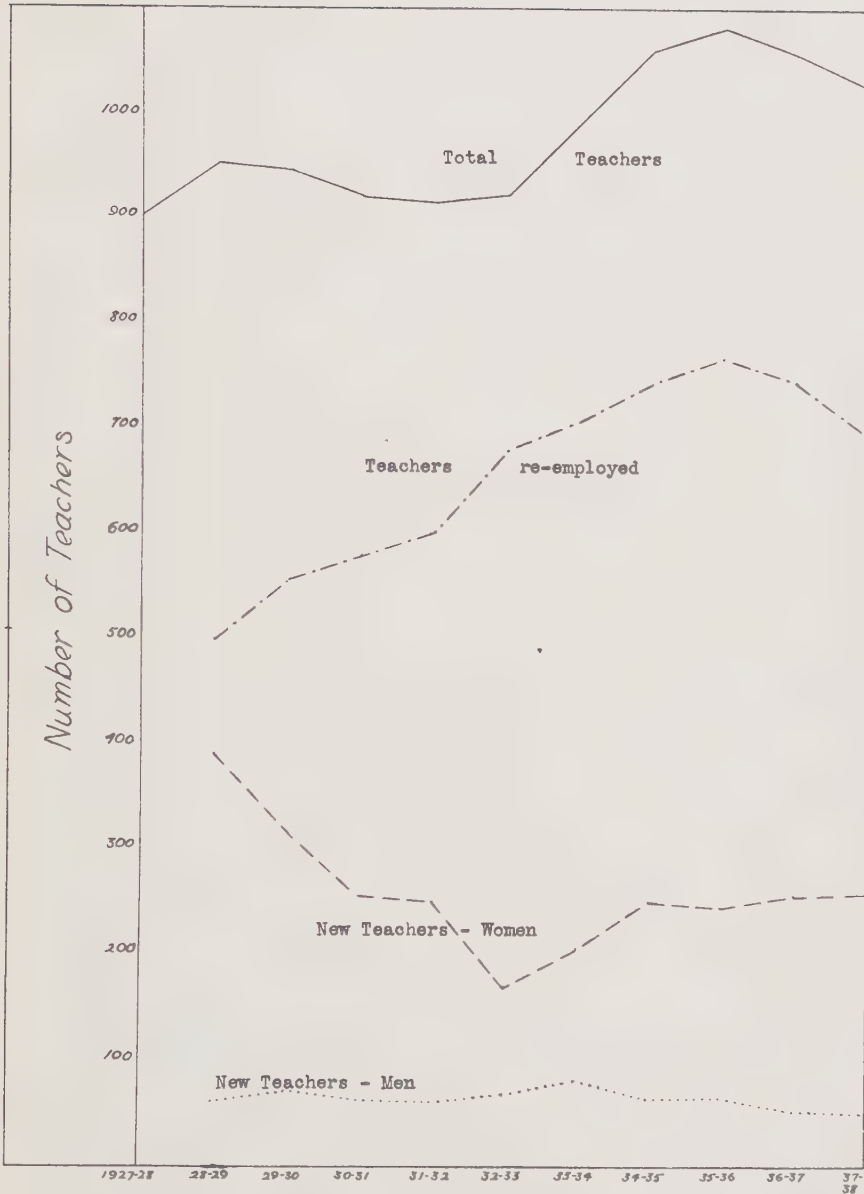


Fig. 3--Trends in the employment of "church school" teachers during the decade preceding 1937-38.

TABLE 9
LENGTH OF SERVICE OF CHURCH-SCHOOL TEACHERS, 1927-28 TO 1937-38
UNITED STATES AND CANADA

Length of Service	Men Teachers		Women Teachers		All Teachers	
	No.	Per Cent	No.	Per Cent	No.	Per Cent
1 Year Only.	357	45.4	1,546	45.4	1,903	45.4
2 Years.	172	21.9	678	19.9	850	20.3
3 Years.	86	11.0	400	11.8	486	11.6
4 Years.	55	7.0	243	7.1	289	6.9
5 Years.	45	5.7	147	4.3	192	4.6
6 Years.	16	2.0	114	3.3	130	3.1
7 Years.	25	3.2	91	2.7	116	2.8
8 Years.	17	2.2	60	1.7	77	1.8
9 Years.	5	0.6	57	1.6	62	1.5
10 Years.	5	0.6	44	1.3	49	1.2
11 Years.	3	0.4	32	0.9	35	0.8
Total . . .	786	100.0	3,403	100.0	4,189	100.0

per cent of the total, taught only one year. An additional 20.3 per cent taught only two years. Of all the teachers employed during this period, 65.7 per cent did not teach beyond the second year. Figure 4 shows the same data in graphic form. The median teacher in length of service taught but two years during the period. The average for the period was 2.59 years.

It may be assumed that many of the 904 teachers of the first year of this period had taught previous to 1927-28, also that many of the 1,028 teachers of 1937-38 would continue for one or more years following that period. A correction was sought by assuming that the teachers of 1927-28 had taught previous to that year as long as the teachers of 1937-38 taught during the decade preceding that year. Teachers of 1937-38, it was assumed, would continue to teach on the average as many years as the 1927-28 teachers taught during the decade following that year. The average length of service of the church-school teacher would thus increase, theoretically, from 2.59 to 3.82 years. This theoretical average is based on two assumptions and covers a period in which rather serious fluctuations in length of service were taking place. The ratio of new teachers employed to the total teaching force during the last six years of this period would suggest an

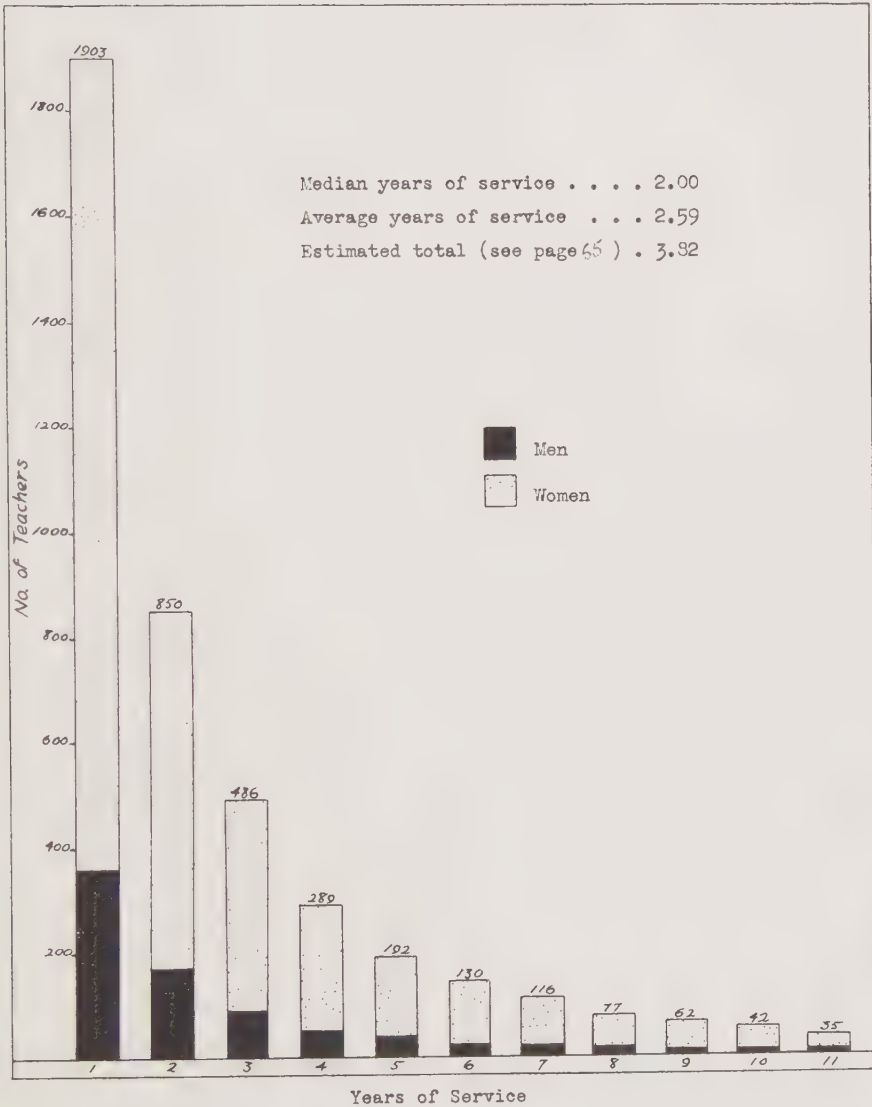


Fig. 4.--Length of service of "church school" teachers during the decade prior to 1937-38.

average of only 3.44 years.

This investigation showed that the length of service of a church-school teacher in that capacity does not represent her total length of service in denominational work. As with the academy teachers, it was found true of the church-school teachers that many of them transferred out of that field at the end of one or two years into such lines as secretarial work and teaching in the academies, whereas others enrolled in the nursing schools or colleges for additional training and ultimately entered other lines of denominational activity.

The question, why so many enter church-school teaching as a stepping-stone and transfer out of it at the earliest opportunity, must be explained largely in terms of the conditions under which they often work and of the rewards offered. In the first place, in almost all of the conferences the teacher is an employee of the local congregation rather than of the state conference. She must often work for boards whose understanding of educational matters is definitely limited. The building in which she teaches and the equipment provided frequently are somewhat inadequate. Since she must often teach all or nearly all eight grades, her work is usually difficult. Furthermore, there is occasionally delay in paying the salary, although the churches usually pay their teachers the amount agreed upon.

It is in the amount of remuneration, however, that the church-school teachers encounter the greatest discouragement. The investigator was able to verify the salaries of all the church-school teachers in North America for the school year 1938-39. The range of salaries with few exceptions was from \$12.50 to \$20.00 per week. That the great majority were paid rates near the bottom of this scale is indicated by the fact that the average wage for the entire group was \$17.80 per week. The length of the school term runs from 36 to 40 weeks, with the majority of the schools paying the teachers for 38 weeks. The average annual salary of the church-school teachers is clearly then about \$524.40.

The salaries of stenographers employed by the various conferences and institutions, for the sake of comparison, may be cited with those of the church-school teachers. It was not practicable for the investigator to verify the salary of all these, but it was found by inquiry that the usual beginning rate was \$16 per week and that many were receiving \$20 and even \$21 per

week. In all cases this was on a continuous basis. That is, the stenographer receives her wages for 52 weeks in the year with two weeks' vacation on pay, and with the assurance that her check will never be delayed. An officer of the treasury department of the General Conference has estimated that the average salary of these employees may be conservatively estimated at \$17.50 per week, or \$910 per year. It thus becomes apparent that the stenographer's annual salary is about 17⁴ per cent of that of the church-school teacher.

A change is slowly taking place in the employment of church-school teachers, and in some fields¹ they are employed directly by the conference and receive their salaries from the conference treasurer. In these cases, the conference supplements the contribution made by the local congregation, and thus assures the teacher a much more equitable salary. It must be admitted that at present, in spite of these improvements, the church-school teachers are inadequately remunerated and the majority of them are unwilling to make this work their life career.

Academy Teachers

A summary of employment of academy teachers is given in Table 10, and the length of service of persons in this line of work is found in Figure 5. The number of new teachers employed by the academies is graphically represented in Figure 6. These data indicate that an average of 97 new teachers have been employed each year during the last ten years, and that the average length of service has been 3.03 for the period. This had been corrected, as explained in connection with the church-school teachers, by calculating the length of service of these teachers in this line of work previous to and following the period surveyed. This procedure gives a corrected average of 4.97 years as the theoretical length of service of academy teachers.

It was felt that an investigation should be conducted as to the reason why the period of service was so short for this group of teachers. Accordingly, a list was prepared of those who between 1930-31 and 1936-37 taught only one or two years and then withdrew from this line of teaching. This list included more

¹The Western Washington Conference led out in this plan.

TABLE 10
SUMMARY OF THE EMPLOYMENT OF ACADEMY TEACHERS

Years	New Teachers Employed			Former Teachers Retained	Total Teachers Employed	Teachers Who Withdrew
	Men	Women	Total			
1927-28	-	-	-	-	356	123
1928-29	70	88	158	233	391	120
1929-30	48	64	112	271	383	105
1930-31	53	53	106	278	384	100
1931-32	33	58	91	284	375	105
1932-33	32	43	75	270	345	80
1933-34	26	31	57	265	322	64
1934-35	37	52	89	258	347	60
1935-36	46	43	89	237	376	97
1936-37	44	51	95	279	374	96
1937-38	50	54	104	278	382	
Totals	439	537	976	2,703	4,037	950
Averages	43.9	53.7	97.6	270.3	376*	95

* This covers an eleven-year period instead of ten years as for the other data.

than three hundred persons, and an investigation was also conducted in order to discover why these people ceased to be academy teachers and to what line of work they turned. In the case of a large number it was impossible to obtain definite information, but reports were received concerning 245. These are summarized in Table 11. It will be noted that 113 of the 245, or 46 per cent of these persons, simply transferred from work in the academy to work in some other denominational activity.

It was ascertained in some cases that certain of these teachers were asked to withdraw from teaching in the academies because of insufficient preparation or lack of ability. As far as could be learned, the larger number seemed to have withdrawn in order to enter some occupation offering more remuneration or better working conditions. As stated in connection with the church-school teachers, many of the academy teachers heretofore have been paid for only 36 or 38 weeks during the year, and even though their

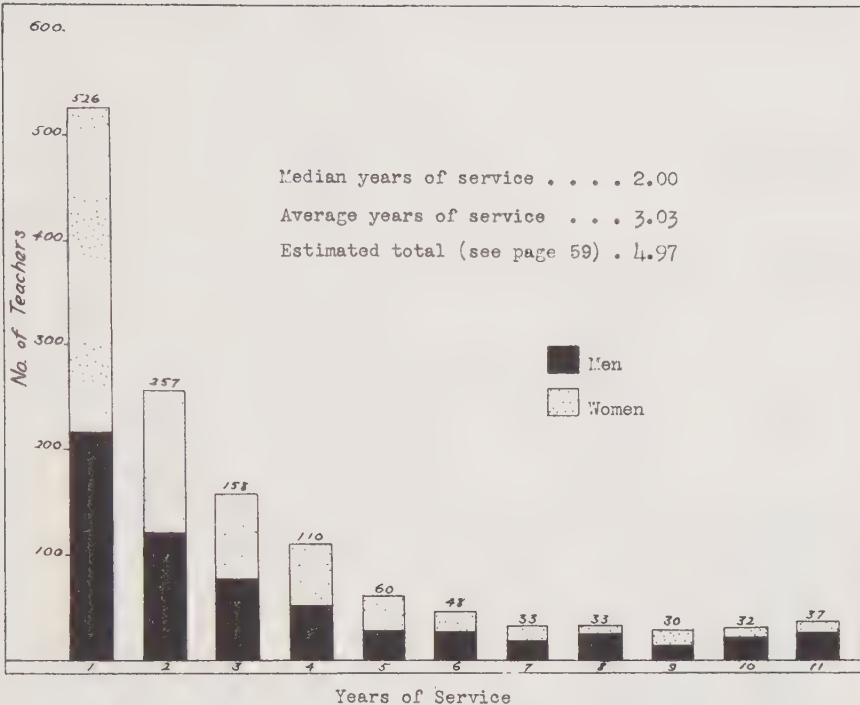


Fig. 5.--Length of service of academy teachers during the decade prior to 1937-38.

salary during the time of employment was equivalent to that paid other denominational workers, they nevertheless found considerable difficulty in providing for themselves during the summer months.

Some effort is now being made in a number of the academies to provide for the teachers during the summer. The length of service of these teachers will tend to increase as the conditions of service are improved. Since, however, more than three-fourths of those who withdraw from teaching in the academies enter other lines of denominational employment or become the wives of denominational employees, the tenure of their service with the denomination becomes comparable with that of the regular conference employees.

Accounting and Secretarial Work

Those engaged in the various clerical lines of denominational work, such as auditors, accountants, secretaries, and ste-

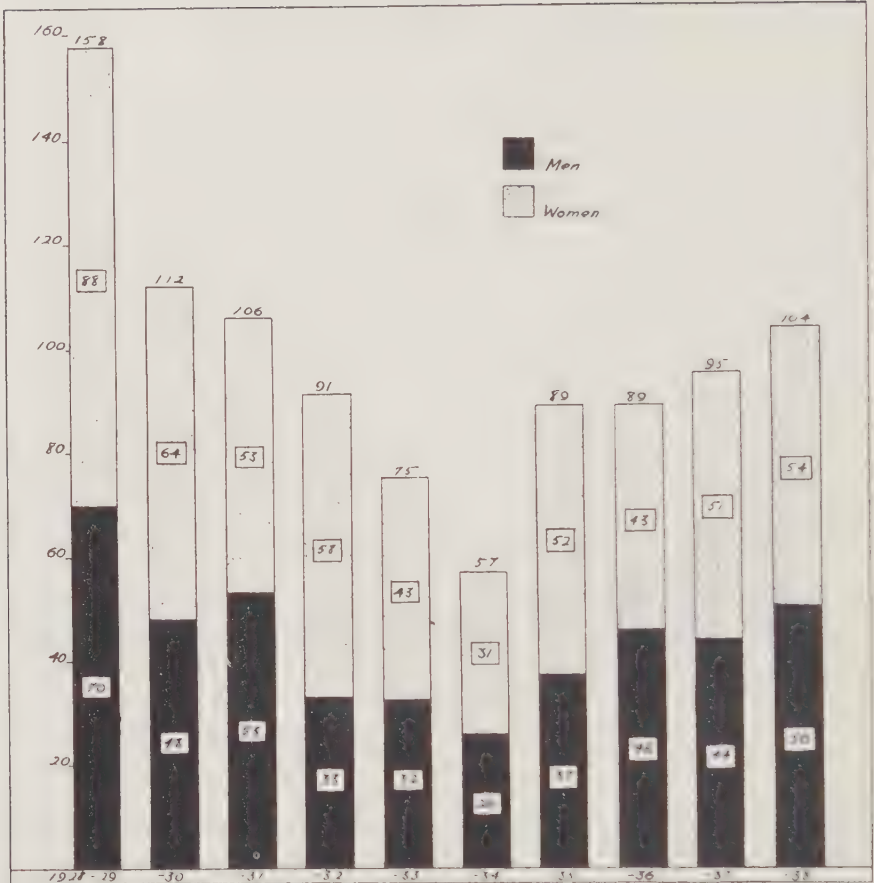


Fig. 6.--Employment of new teachers in the academies from 1928-29 to 1937-38.

nographers, apparently have better conditions under which to work, and are better paid than are the church-school teachers, for example, who are without employment many weeks each year. Their work has brought them into intimate and constant contact with the administration of the conferences. Some of these workers have a voice in the financial decisions made, including that of the remuneration of employees. Their work and their needs are constantly brought to the notice of the conference committees and officers. The result has been that they have been relatively well provided for.

TABLE 11

THE SUBSEQUENT OCCUPATIONS OF 245 TEACHERS WHO TAUGHT
ONLY ONE OR TWO YEARS IN THE ACADEMIES
BETWEEN 1930 AND 1937

Subsequent Occupations	Number Entering Each		Percent of Total
	Occupation	Group of Occupations	
Other Denominational Work		113	46.1
College Teachers	24		
Church School Teachers	23		
Foreign Missionaries	15		
Ministers	11		
Other Conference Workers	11		
Stenographers	3		
Colporteurs	2		
Entered Training for Medicine,			
Nursing, etc.	15		
Workers in Non-Educational Institutions	9		
Home Makers		76	31.0
Non-Denominational Occupations		56	22.9
Music Teachers	9		
Farmers	8		
Public School Teachers	7		
Nurses (Private)	6		
Business Men	5		
Printers	4		
Salesmen	4		
Carpenters and Builders	4		
Plumbers	2		
Miscellaneous (Piano Tuner, Public Health Officer, Accountant, Bookbinder, Dentist, Photographer, and Cemetery Agent)	7		
Total		245	100.00

The foregoing section will explain why there is such a large number of young people in the various schools and colleges looking forward to clerical work. This is not a type of work that has the same denominational appeal as does the ministry, medical work, and teaching. Students who are zealous to have a direct part in the distinctive lines of church endeavor are naturally drawn toward the professional lines. But on the other hand, the provision which the denomination makes for its clerical workers is sufficiently adequate that many who would definitely wish to remain in the teaching profession are attracted to the clerical lines.

Colporteurs

The statistical report gives 900 as the number of persons engaged in the colporteur work. These individuals work on a commission, and although their incomes depend upon the amount of sales of religious literature that they make, they almost universally regard their work as a definite missionary enterprise. Some of these men, although supporting families, continue year after year in this work. A great many others, however, enter for a few months of experience and then change to some other occupation. The number of colporteurs is greatly increased during the summer months, when a large number of students spend their vacation in this work.

In spite of the fact that the colporteur work has a strong appeal to a large number of people and that it has always been recognized and encouraged by the denominational officials, the number who have remained in this occupation through the years is rather small. Except in the very large cities it is necessary for the colporteur to shift his location constantly so as to have new territory, and this usually brings problems and inconvenience to his family. In the last year or two some methods of conducting this work have been devised to make it more attractive. It is possible that a larger number will be employed in the future. So far, graduation from college has not been required except for those who are to become directors of this work in the local conferences, and even in the case of these men, college graduation has only recently been seriously considered as a real requisite.

Self-Supporting Enterprises

The preceding discussion of openings for Adventist youth with some college training has been limited almost entirely to the work of the regular conference organizations and the institutions owned and controlled by the conferences. There are, in addition, a number of enterprises being carried on by groups of Adventists on an independent or self-supporting basis. They are not controlled by the conferences and, for the most part, do not receive regular subsidies from the church organizations. The hospitals and sanitariums belonging to this group have been included in Table 6. Several academies, mostly in the southern states, long to this group as well. The Madison College, near Nashville, Tennessee, has had as its chief objective the training of workers for this type of institution.

In addition to sanitariums, hospitals, and academies, the self-supporting enterprises include the manufacture of health foods, the operation of vegetarian cafeterias, the operation of treatment rooms, and various agricultural enterprises. Up to the present time these institutions have not provided openings for any large number of college-trained youth, although some graduates and students from the other colleges as well as from Madison College have been thus employed.

Summary of Opportunities

The foregoing data have suggested that it is possible to establish with some degree of certainty the approximate number of openings within the service of the church for Adventist youth with college training.

These calculations were summarized in Table 4 on page 26. It will be noted that where there is considerable shifting from one occupation to another within the church, some allowance has been made for this factor in estimating the total number of openings for those who enter the service of the church for the first time.

Nothing, hitherto, has been said as to the relative number of openings for young men and young women. It has been evident, however, that most of the openings pointed out are positions that are being filled almost exclusively by women. For example, of the 225 openings each year in schools of nursing, more than 200 will go to young women. Again, of the 225 church-school teachers

needed each year, at least five-sixths of the positions will be filled by young women. Nearly all of the positions as stenographers and clerical workers will also be the work of young women, and, of course, the positions of Bible workers. Of the 700 annual openings, approximately 500 are filled by young women.

In the remaining 200 positions, men are given the preference. The 45 openings in the ministry will be exclusively for men, and approximately 90 per cent of the openings in the medical school will be filled by men. A number of men teachers will be desired as well as some accountants, and some will be wanted for managerial service. However, even of the positions which were assigned to men, several obviously could be filled by young women. The denomination seems to make a much larger provision for employing the young women of the church than the young men. Since approximately one-half of the 1,400 entering freshmen each year in the denominational colleges are women, it is evident that nearly three-fourths of these can expect direct denominational employment or admission to the nursing schools. Less than one-third of the men, however, can be absorbed by the denomination itself.

The question may well be raised as to whether some of the positions now filled by women could not be given to men. It appears to the investigator that not much transference of this kind is likely to take place. Most of the young women enter three occupations: nursing, elementary teaching, and stenography. Data presented have shown that no increase in men students in the denominational nursing schools can be expected; some men are already teaching church schools and the trend is not in that direction; and it is hardly probable that men stenographers will become very numerous.

CHAPTER III

OCCUPATIONAL OPPORTUNITIES IN NON- DENOMINATIONAL ACTIVITIES

Criteria for the Identification of Other Suitable Occupations

The 1937 annual statistical report¹ states that the number of denominationally employed persons in North America is as follows: Evangelistic, 3,016; institutional, 7,151; total, 10,167. This report, however, includes 735 practicing physicians who are not on the payroll of any institution or conference, and 900 col-porteurs who sell religious literature on a commission, and who, therefore, cannot be considered for the purposes of this study as permanent employees. The number of regular employees of the denomination in the North American division therefore is reduced to 8,531. Since the total number of Seventh-Day Adventists in North America was, on December 31, 1937, 164,490, it is evident that only a small fraction of the entire church membership is in the full-time employ of the denomination itself.

The problem, if approached from another angle and consideration limited for the moment to only those Adventist youth who enter Adventist colleges, finds the freshman class of 1938-39 to be in excess of 1,800 students. If reasonable allowance is made for those who, because of part-time employment, failed to secure sophomore standing during the first year, it is estimated that some 1,400 Seventh-Day Adventist youth enter the denomination's colleges each year for the first time. The study of the possibilities of employment by the denomination indicates that not over half of the entering freshmen can expect employment directly or indirectly by the denomination itself. Because this investigation is concerned primarily with those who do enrol in the colleges, the study of employment possibilities outside the denomination was

¹Statistical Report of Seventh-Day Adventist Conferences, Missions, and Institutions, op. cit.

carried on with this group constantly in mind. Since at least half of those who enrol in Adventist colleges must seek employment in non-denominational occupations, a very serious part of the study concerned itself with the identification of the non-denominational occupations that would be suitable for Seventh-Day Adventists. It was possible to set up several criteria for this.

The distinctive beliefs and attitudes of Adventists carry definite vocational implications, some of which are negative by nature and can be translated into definite prohibitions: the improper observance of the Sabbath; participation in the manufacture or distribution of narcotics, alcohol, and tobacco; the bearing of arms; participation in many forms of commercialized entertainment. Being negative in their nature, these criteria do not suggest what Adventists should do, but definitely limit the range of occupations in which they may participate with the approval of the church and their own consciences.

Criteria of a positive nature may also be set up in the same way as previously set forth. First, the Adventist must be zealous for the spread of the Gospel. Even though not called upon for full-time service for the church, he expects to have some definite part in promoting and financing its program. Second, his occupation must be socially desirable; it must spring from a love for his fellow men. His occupation must be one that the church considers a benefit to society.

The investigator held that the validity of these criteria should be tested in the light of the actual experiences that Adventists are having in the occupations in which they are engaged, and so decided that a sampling should be taken of the opinion of Seventh-Day Adventist laymen--that is, of those not in denominational employ--as to the suitability of their present occupations. The methods employed for gathering this information were as follows:

Adventists employed in occupations not connected with the denomination were asked to supply definite information as to the suitability in terms of their religious beliefs and attitudes of the occupations in which they were engaged. The investigator used two methods in obtaining this information. The first involved the use of questionnaires, over five thousand of which were distributed in the churches by a number of Adventist ministers in several of the North Central states. The number of questionnaires

that were filled out and returned to the investigator was less than one thousand. Some of these were not usable because of the incompleteness with which they were filled out, or because more than one person in a given family had filled out blanks, or in some cases because the blanks were filled out by home-makers. Altogether nearly five hundred usable questionnaires were obtained. Some of these were accompanied by letters with extended discussions, and many of them contained explanations and comments. This procedure, although limited in extent, provided an illuminating view of the occupational situation among Adventists.

Another method used was to print the questionnaire, together with an explanation, on a full page of the Columbia Union Visitor, which reaches more than eight thousand Adventist families in the Columbia Union Conference.¹ Those who were definitely employed in occupations outside the denomination were asked to fill out and return the questionnaire. Several very interesting reports came in, but because the number was limited, the questionnaires received in this way were combined with those taken up by pastors.

It became apparent during the time in which information was being gathered concerning the occupations of Seventh-Day Adventist laymen that this group was not entirely representative, on a proportional basis, of the families from which the students were coming. As the investigation was concerned primarily with the problems of the students, it was later decided to limit this part of the study to the occupations of the parents of the students themselves. This proved to be a workable plan and yielded what seemed to be satisfactory data.

It was first decided to obtain these data by means of the records available in the registrars' offices in the various institutions, and information of this kind was secured at Emmanuel Missionary College, Union College, Atlantic Union College, Mount Vernon Academy, Indiana Academy, and Broadview Academy. Certain problems, however, arose. Not all of the institutions secured this information from their students. Where the information was available, it could be obtained only by the very time-consuming process of examining each individual application. In many cases,

¹The territory of the Columbia Union Conference consists of the states of Pennsylvania, Maryland, Virginia, West Virginia, New Jersey, and the District of Columbia.

the records did not indicate whether or not both parents were members of the Seventh-Day Adventist Church; and still a further important shortcoming of the application blanks was that no information was given by the applicant as to whether or not his parents, if Adventists, found their occupation a suitable one for members of the church.

The investigator then visited personally five of the senior colleges, two of the junior colleges, and several of the academies in order to obtain this information and other data of equal importance. The institutions visited, with the enrolment of each, are shown in Table 12.

A questionnaire was prepared for each institution, and sent to the president or principal two or three weeks previous to the time indicated for the personal visit. The officer in each case was asked to mimeograph the questionnaire, if it met his approval, in sufficient numbers for all the students in attendance, and to take up the matter with the students at one of the morning assemblies. This gave the officer in charge an opportunity to explain the purpose of the investigation and the value of the contribution that each one could make by a few minutes of work. He then distributed the questionnaires and had the students fill them out.

The only additional work asked of the officers of the institutions previous to the arrival of the investigator was that the registrar place on each blank the measure or measures of scholastic aptitude that the institution had available. The measure suggested as the one preferred by the investigator was the Psychological Examination of the American Council on Education. (The questionnaire used is reproduced in the Appendix.)

All of the institutions visited coöperated to the extent of gathering the information called for by the questionnaires. When it came to the matter of recording the scores for scholastic ability, some of the academies had given no mental test of any kind this year, and in all of the institutions there were some students for whom no scores were available. On the occasion of the visits, where the scores had not been recorded on the questionnaires, the investigator personally assisted the registrar or other officer in recording all of the measures that were available. In one or two cases, testing was still in progress and the scores were sent on after the visit had been made.

TABLE 12

THE INSTITUTIONS STUDIED IN THIS INVESTIGATION^a

Institutions	Opening Enrollment Sept. 1938
SENIOR COLLEGES	
Atlantic Union College ^b	261
Emmanuel Missionary College	411
Pacific Union College	552
Union College	530
Walla Walla College	410
Washington Missionary College	444
Total	2,608
JUNIOR COLLEGES	
Southern California Jr. College	310
Southern Jr. College	110
Southwestern Jr. College ^b	101
Total	521
INDEPENDENT ACADEMIES	
Broadview Academy, La Grange, Illinois	202
Glendale Union Academy, Glendale, California	137
Indiana Academy, Cicero, Indiana	103
Laurelwood Academy, Gaston, Oregon	194
Loma Linda Academy, Loma Linda, California	132
Lynwood Academy, Lynwood, California	328
Mount Vernon Academy, Mount Vernon, Ohio	150
Total	1,246
DEPENDENT ACADEMIES	
Emmanuel Missionary College Academy	82
Pacific Union College Academy	96
Southern Jr. College Academy	105
Union College Academy	72
Walla Walla College Academy	109
Washington Missionary College Academy	164
Total	628
RECAPITULATION	
Total Enrollment - Senior Colleges	2,608
Total Enrollment - Junior Colleges	521
Total Enrollment - Independent Academies	1,246
Total Enrollment - Dependent Academies	628
Grand Total	5,003

^aThe College of Medical Evangelists, Loma Linda and Los Angeles, California, and some of the larger nursing schools were also visited by the investigator during this study.

^bThese two institutions were not visited at this time, but both institutions supplied data for the investigator's use.

When all of the information concerning the occupations of Seventh-Day Adventists had been assembled, it was found that some elimination was necessary. Reasonable care was exercised to the end that the data obtained from institutional records concerning the occupations of parents did not duplicate the information obtained directly from the students themselves. When all eliminations had been made for unsatisfactory and incomplete records of every kind, and after the elimination of duplications, the data were distributed as follows:

There were 507 usable reports concerning the occupations of "laymen," mostly in the North Central states.

The number of reports of parents definitely known to be Seventh-Day Adventists was 2,367. These were distributed almost evenly according to the denominational population from the Atlantic Coast to the Pacific. A number were in Canada, and the representation included all the states in the Union.

Another group of 1,641 was of the parents of students in Seventh-Day Adventist colleges and academies, whose exact church relationship was not ascertained. Although it was repeatedly verified that the students in the Adventist colleges come almost exclusively from homes in which at least one parent is a Seventh-Day Adventist, it is nevertheless probable that this group included a few non-Adventists and possibly some families in which only one of the parents was an Adventist.

Finally, a group of 877 parents was identified in which only one parent, usually the mother, was a Seventh-Day Adventist. It was decided that these four groups should be listed separately and then combined into a total for each occupation represented.

This study of the pattern of occupational employment among Seventh-Day Adventists is not only the most extensive ever undertaken for the denomination, but as far as the investigator was able to learn, the only one extending further than a few hundred names. Previous samplings have not extended beyond the clientele of some one particular institution.

Occupations of 5,386 Adventist Families

The data concerning the occupations of Seventh-Day Adventists here assembled represent a random sampling as far as geographical distribution is concerned. It will be recalled, however, that aside from the 500 "laymen" who constitute less than 10 per

cent of the total, the sampling is not of all Adventist families, but rather of the families who send their children to Adventist colleges and academies.

The investigator does not assume that these parents of the students in Adventist colleges are necessarily typical of Adventist families in general, but he does believe that they represent the Adventist group whose children are the subject of primary consideration in this study.

It should be stated also that the purpose of this part of the study was not to discover with any high degree of accuracy the exact percentage of Adventists engaged in any certain occupation. The purpose of the investigation was rather to discover the types of occupations that were the most appropriate for this religious group, and in so doing to obtain the criteria that may be used for the identification of suitable vocations for these people.

The problem of a proper classification of occupations is a difficult one, and one concerning which authorities do not always agree. It was finally decided that for the purpose of this investigation the most suitable classification would be "professions," "agriculture," "business," "clerical work," "personal service," and "skilled trades." The word "profession," as applied to occupations at the present time, is used with a good deal of flexibility. For the purpose of this study, it was felt that the term not only could be made to include those engaged in the older and recognized professions, such as ministry, medicine, engineering, teaching, and architecture, but could also be extended to include musicians, social workers, nurses, librarians, and laboratory technicians, since at present persons preparing for all of these occupations should have some college training. It is recognized that the classification leaves much to be desired. For example auditors have been placed under clerical work, although a number of them could properly be classified with the professional group. Again, under the skilled trades, it is manifestly impossible always to know whether or not an individual is really a skilled worker or only semi-skilled, when he states that he is a "mechanic" or "printer," and so forth.

A number who have been classified as "enginemen" under the skilled trades should perhaps have been classified as "engineers." In several cases persons who had stated that they were

"engineers" were found upon investigation to be men who tended engines and with no professional training as engineers. It was, therefore, decided to list as "enginemen" all those who claimed to be "engineers," unless there was evidence that they really were professional engineers. Certain inaccuracies of this kind were inevitable, but perhaps do not seriously affect the value of the classification for this purpose. One discrepancy that undoubtedly affects a number concerns those listed as "carpenters." It is known that a number of these are at the present time engaged in the manufacturing of furniture. However, as they had previously been employed as "carpenters," many of them continued to classify themselves as such. This will explain why the number of "carpenters" seems unusually large, and the number of "cabinet makers" and "woodworkers" is relatively small.

"Interior decorators" have been listed with the skilled trades rather than with the professions for the reason that a number of individuals who designated themselves in this way were discovered by investigation to be skilled workmen, rather than professionally trained people. The reader should bear in mind that without doubt several of these people are professionally trained persons and should be listed with the professions. The investigator could not verify information of this kind except in a comparatively limited number of cases.

Table 13 classifies these 5,386 families according to their occupations, following the method just described. Group 1 is of the "laymen" whose occupations were investigated before the study was restricted to the parents of Adventist students. Group 2 is of families in which both parents were known definitely to be Adventists. The families included in Group 3 are doubtless nearly all Adventists. Information concerning them was taken from records which failed to state the exact church relationship of these persons. As over 95 per cent of the students of Adventist colleges are from Adventist homes, it may be assumed that this group includes very few others. However, some may be homes where only one member is an Adventist. Group 4 is of homes in which only one member, usually the mother, is an Adventist.

An examination of Table 13 indicates that Adventists are found much more frequently in some occupations than in others. For example, in the case of the professions, large numbers are found to be teachers, physicians, and nurses, but very few lawyers.

TABLE 13

THE OCCUPATIONS OF PARENTS OF SEVENTH-DAY ADVENTIST STUDENTS

Occupations	Group 1 ^a	Group 2 ^b	Group 3 ^c	Group 4 ^d	All Groups	% of Total
Professions						
Ministers	..	230	73	1	304	5.64
Teachers	10	129	64	14	217	4.03
Physicians	2	124	30	9	165	3.06
Nurses	19	70	37	4	130	2.41
Lab. Technicians	3	23	4	1	31	.57
Engineers	1	5	7	17	30	.55
Musicians	14	4	1	2	21	.39
Lawyers	..	8	6	4	18	.33
Architects	1	6	5	3	15	.28
Artists	1	9	3	1	14	.27
Dentists	1	6	6	..	13	.24
Journalists	..	10	2	1	13	.24
Scientists	1	6	3	..	10	.19
Pharmacists	1	1	4	2	8	.16
Optometerists	..	3	4	..	7	.13
Social Workers	5	..	2	..	7	.13
Morticians	2	..	2	..	4	.07
Surveyors	2	..	1	..	3	.05
Osteopaths	..	1	..	1	2	.04
Opticians	..	..	1	1	2	.04
Librarians	..	1	..	..	1	.02
Translators	..	1	..	..	1	.02
Total	63	638	254	61	1,016	18.86
Agriculture						
General Farmers	83	510	453	149	1195	22.19
Dairymen	3	32	33	14	71	1.32
Truck Farmers	6	19	14	5	44	0.82
Florists	3	21	6	4	34	.64
Stock Raisers	3	12	11	7	33	.61
Lumbermen	..	18	6	9	33	.61
Fruit Growers	1	16	1	3	21	.39
Poultrymen	2	13	1	2	18	.33
Fur Farmers	..	1	4	1	6	.11
Nurserymen	..	4	1	..	5	.09
Fishermen	..	2	1	..	3	.05
Apiarist	1	..	..	..	1	0.02
Total	102	648	520	194	1,464	27.18

TABLE 13--Continued

Occupations	Group 1 ^a	Group 2 ^b	Group 3 ^c	Group 4 ^d	All Groups	% of Total
Business						
Salesmen	39	83	76	34	232	4.31
Merchants	21	75	46	36	178	3.30
Contractors	8	83	30	22	143	2.65
Managers		22	36	17	75	1.41
Manufacturers	1	13	5	5	24	0.45
Real Estate Agents ..	4	12	2	5	23	.43
Store Clerks	5	1	9	5	20	.37
Hotel Managers	6	1	3	5	15	.28
Insurance Agents	1	5	1	3	10	.19
Garage Owners	2	5	3		10	.19
Restaurateurs		3	1	1	5	.09
Tourist Camp Managers	..	..	1	3	4	.07
Automobile Dealers ..	..	3	..	1	4	.07
Bankers	..	..	..	3	3	.05
Wholesalers	..	1	..	2	3	.05
Total	87	307	213	142	749	13.91
Clerical Work						
Accountants	11	60	25	13	109	2.02
Clerks (office)	..	10	5	6	21	.39
Secretaries	12	2	2	3	19	.36
Total	23	72	32	22	149	2.77
Personal Service						
Housekeepers	28	14	23	6	71	1.33
Cleaners and Laundrymen	13	11	10	7	41	.76
Practical Nurses	14	9	2	6	30	.57
Janitors	4	8	10	5	27	.50
Barbers	5	9	8	2	24	.45
Chauffeurs	2	1	18	1	20	.37
Cooks	4	12	1	2	19	.35
Beauticians	6	3	1	3	12	.22
Circus performers	..	..	..	2	2	.04
Total	76	67	71	53	247	4.59

TABLE 13--Continued

Occupations	Group 1 ^a	Group 2 ^b	Group 3 ^c	Group 4 ^d	All Groups	% of Total
Skilled Trades						
Carpenters	14	146	76	42	281	5.21
Mechanics	2	37	40	24	103	1.91
Machinists	19	21	42	15	97	1.80
Printers	6	35	27	5	73	1.15
Painters	6	25	20	9	60	1.13
Interior Decorators ..	16	15	23	4	58	1.07
Electricians	3	15	24	13	55	1.02
Enginemmen	3	30	8	13	54	1.00
Bakers	5	35	2	2	44	0.82
Masons and Plasterers	2	21	11	9	43	.80
Plumbers and Steam Fitters	..	22	6	11	39	.72
Cabinet Makers and Woodworkers	1	17	11	5	34	.64
Dressmakers	10	7	6	2	25	.46
Miners	1	14	..	5	20	.37
Auto Mechanics	4	6	2	8	20	.37
Piano Tuners	4	3	6	1	14	.27
Tinners	1	2	8	3	14	.27
Moulders	6	3	2	..	11	.20
Tailors	..	3	8	..	11	.20
Shoe Repairers	..	4	3	3	10	.19
Upholsterers	1	..	7	1	9	.17
Welders	..	6	1	1	8	.16
Radio Technicians	2	1	2	3	8	.16
Blacksmiths	1	4	2	1	8	.16
Telephone Operators ..	1	3	1	2	7	.13
Watchmakers	..	4	1	1	6	.11
Pattern Makers	..	1	2	3	6	.11
Bookbinders	2	3	1	..	6	.11
Photographers	1	3	1	1	6	.11
Steel Constructionists	..	..	2	3	5	.09
Well Drillers	1	1	3	..	5	.09
Boiler Makers	..	..	4	..	4	.07
Broom Makers	2	1	..	..	3	.05
Glaziers	..	1	..	2	3	.05
Stone Carvers	..	..	2	..	2	.04
Inventors	..	..	2	..	2	.04
Tent Makers	1	..	1	..	2	.04
Refrigeration	..	1	..	..	1	.02
Leather Workers	..	..	..	1	1	.02
Coopers	1	..	..	..	1	.02
Projectionists	..	..	1	..	1	.02
Awning men	..	1	..	..	1	.02
Miscellaneous	..	..	13	6	19	0.35
Total	116	494	362	199	1,171	21.74

TABLE 13--Continued

Occupations	Group 1 ^a	Group 2 ^b	Group 3 ^c	Group 4 ^d	All Groups	% of Total
Miscellaneous						
Laborers	11	45	67	23	146	2.71
R. R. Employees	9	13	50	61	133	2.47
Factory Workers	13	33	29	15	90	1.68
Postal Employees	2	8	11	23	44	0.82
Truckers	4	12	..	19	35	.65
Oilmen	..	5	..	30	35	.65
Government Officials	2	6	15	12	35	.65
Watchmen	..	3	2	12	17	.31
Firemen	..	2	6	9	17	.31
Public Service						
Employees	2	1	2	7	12	.22
Navy and Maritime	..	..	..	10	10	.19
Soldiers	..	3	2	2	7	.13
Highway Employees	..	1	2	2	5	.09
Wardens	..	..	1	1	2	.03
Guides	..	..	1	..	1	.02
Handwriting Expert	..	..	1	..	1	.02
Total	43	132	189	226	590	10.95
Recapitulation						
Professions	63	638	254	61	1,016	18.86
Agriculture	102	648	520	194	1,464	27.18
Business	87	307	213	142	749	13.91
Clerical Work	23	72	32	22	149	2.77
Personal Service	76	67	71	33	247	4.59
Skilled Trades	116	494	302	199	1,111	20.74
Miscellaneous	43	132	189	226	590	10.95
Total	501	2,367	1,641	877	5,386	100.00

^aThis is the preliminary group of Seventh-day Adventist "laymen."
See page 70.

^bThis group of parents of students in Adventist schools were known
to be Adventists themselves. See page 75.

^cThis group of parents of students in Adventist schools were pre-
sumably all, or practically all, Adventists.

^dThis group of families of Adventist students were "divided homes"
--only one parent being an Adventist.

The investigator discovered that Adventist lawyers are apparently those who received their training and entered into the practice of law before they became Adventists. There are almost no instances of Adventist youth who deliberately chose and prepared for that vocation. Both the preparation for and the practice of law have proved difficult for Adventists, especially because of the Sabbath. This is true also of engineers and architects, although the limited evidence available, in the form of comments by laymen on the desirability of their occupations, indicated that the Adventist engineers and architects found their occupations more suitable than did the lawyers. In the case of dentists, artists, social workers, scientists, librarians, optometrists, etc., the reason for the small number of Adventists seemed to be that these occupations have never been promoted in the denominational schools, rather than because they were unsatisfactory. An illustration of this is the rapid increase which has taken place in the number choosing dentistry since the denomination began to encourage that line of work.

No sections were set up for such important lines as "transportation" and "communication." Persons engaged in these lines were listed in the miscellaneous occupations because these occupations did not seem to apply very often to those who were known to be Seventh-Day Adventists. It will be noted, for example, that in Group 4, which includes the families in which the husband usually is not an Adventist, there are 61 railroad employees, even though the total group was only 877; whereas Groups 1 and 2, together numbering 2,868, list only 22 as being railroad employees. This also applies to postal employees, government employees and officers, firemen, policemen, etc. In the case of the three individuals in Group 2 listed as soldiers, it was found that these were individuals who had become Adventists later in life after having obtained definite rank in the army, some being retired army officers.

The Attitudes of Seventh-Day Adventists toward Their Occupations

Each individual, in the case of the families represented in Groups 1 and 2 in Table 13, was asked to indicate whether he considered his occupation a suitable one for Seventh-Day Adventists. Where this information was obtained from the students, they were asked to give the same information concerning the occu-

pations of their parents. The results are tabulated in Table 14.

TABLE 14
ATTITUDE OF ADVENTISTS TOWARD THEIR OCCUPATIONS

Occupations	Number Expressing Attitudes			Occupations	Number Expressing Attitudes		
	Favorable	Unfavorable	Doubtful		Favorable	Unfavorable	Doubtful
Professions				Clerical			
Nurses	176	2	1	Accountants,			
Teachers	147	3	1	Office clerks,			
Physicians	134	..	..	Bookkeepers . . .	52	6	3
Engineers	35	2	3	Stenographers . .	21	1	1
Lab. Technicians . .	20	..	..	Clerks	7	1	..
Musicians	15	2	..	Total	80	8	4
Artists	10	..	1				
Lawyers	7	1	3	Skilled Trades			
Draftsmen and				Carpenters	195	6	2
Architects	9	1	..	Machinists and			
Authors	8	..	..	Mechanics	85	12	4
Dentists	6	..	..	Masons and			
Chemists	6	..	..	Plasterers	41	1	2
Pharmacists	5	..	..	Decorators	47	..	..
Opticians	4	..	..	Printers	35	..	3
Dietitians	2	..	..	Bakers	23	4	2
Surveyors	..	2	..	Painters	20	1	..
Morticians	2	..	..	Plumbers	25	1	2
Translators	1	..	..	Seamstresses . . .	23	1	2
Librarians	1	..	..	Electricians . . .	13	..	1
Total	488	12	10	Cabinet Makers . .	18	..	..
Business				Moulders	6	2	1
Merchants	101	9	3	Shoe Makers	6	..	1
Contractors	96	1	1	Welders	6	..	..
Salesmen	40	7	6	Blacksmiths . . .	6	..	..
Managers of Hotels,				Radio Service			
Rooming Houses,				Technicians	5	1	..
Apartments	24	4	2	Bookbinders	5	..	..
Real Estate	17	..	..	Photographers . . .	5	..	..
Insurance	10	..	1	Miners	4	..	1
Foremen	8	1	1	Watch Repairers . .	5	..	..
Store Clerks	3	2	..	Piano Tuners . . .	4	..	..
Jobber	5	..	..	Broommakers	4	..	..
Manufacturers . . .	4	..	..	Millwrights	3	..	1
Total	303	24	14	Telephone Operator	4	..	..
				Tinners	3	..	..
				Carried Forward	609	29	22

TABLE 14--Continued

Occupations	Number Expressing Attitudes			Occupations	Number Expressing Attitudes		
	Favorable	Unfavorable	Doubtful		Favorable	Unfavorable	Doubtful
Skilled Trades Brought Forward	609	29	22	Agriculture			
Well Drillers . . .	3	..	..	General Farming . .	672	6	9
Carpet & Linoleum Layers	1	..	..	Truck Gardening and Florists . .	55	1	..
Coopers	1	..	..	Dairymen	41	1	2
Locksmiths	1	..	..	Lumbermen	34	3	1
Refrigeration Men	1	..	..	Chicken Raisers . .	14	..	..
				Fishers	3	1	..
Total	616	29	22	Total	909	12	13
Personal Service				Miscellaneous			
Housekeepers . . .	28	7	3	Laborers	63	7	1
Truckers	26	2	2	Factory Workers . .	47	6	2
Practical Nurses and Orderlies . .	25	1	1	Railroad Employees	11	8	1
Laundry Workers . .	13	7	..	Public Functionaries	7	..	..
Janitors	15	..	..	Postal Employees . .	5	..	..
Cooks	15	1	2	Social Workers . . .	5	..	..
Barbers	10	..	1	Glass Workers . . .	3	..	..
Beauty Parlor Operators	6	2	1	Public Service Employees . . .	1	2	..
Waiters	3	..	..	Total	142	24	4
Treatment-Room Operators	4	..	..				
Maids	3	..	..	Recapitulation			
Porters	1	..	1	Professions	488	12	10
Chiropractors . . .	..	1	..	Business	308	24	14
News Dealers . . .	1	..	..	Clerical	80	8	4
Hotel Employees . .	..	1	..	Skilled Trades . . .	616	29	22
				Personal Service . .	150	22	17
Total	150	22	17	Agriculture	909	12	13
				Miscellaneous . . .	142	24	4
				Total	2,693	131	84

In response to the questions, "Do you consider your work an entirely satisfactory occupation for Seventh-Day Adventists?" and "Why do you give this answer?" several hundred comments were made. As these were studied, it was evident that the comments of these Seventh-Day Adventist laymen could be easily grouped about a few central themes, and that the themes themselves implied rather definitely that these people had set up for themselves certain criteria, though doubtless they had never thought it out in any formal way.

The most frequently occurring criteria expressed in these comments suggested that in their opinion an occupation suitable for Adventists should provide:

1. Opportunity for the observance of the seventh day as the Sabbath.
2. A reasonable amount of flexibility not only as to the days and hours when work must be performed, but also as to the nature of the work.
3. The work should be honest and socially desirable.
4. The occupation should not prevent some active participation in the church's missionary program.

CHAPTER IV

THE EVALUATION OF THE VOCATIONAL CHOICES OF SEVENTH-DAY ADVENTIST STUDENTS

Criteria for Evaluation

The preceding chapters have been devoted largely to the search for a suitable basis for the evaluation of the vocational choices of the students in Seventh-Day Adventist colleges. The data obtained suggested that the occupational plans of these students could be tested as to their adequacy in terms of the following four criteria: (1) denominational beliefs and attitudes, (2) probable opportunities for employment, (3) scholastic abilities of the students choosing each occupation, and (4) the factors that had been influential in the choices made.

The Occupational Plans of Adventist Students

Of the 3,612 students enrolled in Seventh-Day Adventist senior and junior colleges at the opening of the 1938-39 school year, it was possible to ascertain the vocational plans of 2,061 who had made definite choices. Table 15 indicates, in the first column, the occupations that these 2,061 college students expect to enter. The second column gives the number that chose each occupation. The third column indicates the percentage of the total that chose each of the occupations; and in the last column, entitled "all students," the 3,612 students have been distributed on the same basis as those who indicated their vocational plans. That is, it has been assumed that the remaining 1,551 students from whom no definite information was obtained have the same vocational plans as the sampling of 2,061 who indicated definite choices. This assumption seems reasonable because in every case the samplings were random; the students who were available for filling out the questionnaires were the ones that supplied the information, and no effort was made to select any special group of students, or students with any special interest.

TABLE 15

THE VOCATIONAL PLANS OF STUDENTS IN SEVENTH-DAY
ADVENTIST COLLEGES

Occupations	Number of Cases	Per Cent of Cases	All Students*
Professions			
Teachers	467	22.65	824
Ministers	310	15.04	543
Physicians	307	14.89	538
Nurses	303	14.70	531
Secretaries	215	10.43	377
Business	73	3.54	128
Bible Workers	58	2.81	121
Accountants	55	2.67	96
Dietitians	45	2.18	79
Dentists	30	1.45	52
Musicians	27	1.31	47
Scientists	24	1.16	42
Laboratory Technicians	21	1.02	37
Journalists	20	0.97	35
Engineers	17	.89	32
Lawyers	7	.34	12
Artists	6	.29	10
Librarians	3	0.14	5
Miscellaneous professions	23	1.07	39
Total	2,011	97.57	3,524
Trades and Agriculture	50	2.43	88
Grand Total	2,061	100.00	3,612

*In this column the total enrollment of 3,612 college students is distributed on the same basis that the 2,061 cases studied distributed themselves.

Table 16 gives the vocational plans for these same 2,061 students grouped according to college years. In this table, accounting and business were combined, and the term "miscellaneous professions" was extended to include also those planning to be veterinarians, morticians, social workers, authors, lecturers, and so forth.

Nearly one-half of these students are freshmen and many shifts in their vocational choices are to be expected. That these shifts will probably result in a still greater concentration within a narrow range of occupations is evident from the data for the upper years.

TABLE 16

VOCATIONAL PLANS OF SEVENTH-DAY ADVENTIST COLLEGE STUDENTS BY CLASSES

Occupations	Freshmen	Sophomores	Juniors	Seniors	Totals
Professions					
Teaching	118	150	116	83	467
Ministry	115	58	69	68	310
Medicine	139	91	52	25	307
Nursing	215	45	22	21	303
Bible Work	30	13	11	4	58
Dietetics	20	12	5	8	45
Dentistry	14	12	3	1	30
Music	20	7	4	1	27
Science	13	7	3	1	24
Laboratory Technician .	14	2	4	1	21
Journalism	7	7	4	2	20
Misc. Professions . . .	29	8	6	2	45
Total	729	412	299	217	1,657
Clerical and Business					
Secretarial	122	60	25	8	215
Accounting and Business	56	38	19	15	128
Miscellaneous	4	4	2	1	11
Total	182	102	46	24	354
Agriculture	14	7	5	2	28
Skilled Trades	10	5	5	2	22
Grand Total	935	526	355	245	2,061

Table 17 corresponds with Table 15, except that it represents the vocational choices of 923 pupils in several independent academies, namely: Broadview (Illinois), Mount Vernon (Ohio),

TABLE 17

THE VOCATIONAL PLANS OF PUPILS IN SEVENTH-DAY ADVENTIST ACADEMIES

Occupations	Number of Cases	Per Cent of Cases	All Pupils*
Professions			
Nurses.	250	27.09	2,094
Physicians.	167	18.10	1,399
Teachers.	91	9.86	762
Ministers.	63	6.82	527
Musicians.	25	2.71	199
Dentists.	16	1.73	134
Dietitians.	11	1.19	92
Laboratory Technicians. .	11	1.19	92
Morticians.	10	1.08	83
Scientists.	9	0.97	76
Radio Technicians. . . .	9	.97	76
Architects.	8	.86	67
Lawyers.	7	.76	59
Bible Workers.	6	.65	51
Artists.	6	.65	51
Journalists.	5	.55	43
Librarians.	2	.22	17
Pharmacists.	1	0.11	9
Total	701	75.95	5,873
Skilled Trades			
Aviators.	14	1.50	116
Engineers.	13	1.41	109
Mechanics.	13	1.41	109
Printers.	13	1.41	109
Woodworkers.	7	0.76	59
Painters.	5	.55	43
Enginemen.	4	.43	36
Dress Designer.	1	.11	8
Refrigeration.	1	.11	9
Electrician.	1	.11	8
Telephone Operator. . . .	1	.11	9
Photographer.	1	0.11	8
Total	72	7.80	603

TABLE 17- Continued

Occupations	Number of Cases	Per Cent of Cases	All Students*
Agriculture	21	2.17	168
Clerical			
Secretaries	100	10.83	837
Accountants	18	1.95	151
Total	118	12.78	988
Business			
Managers	6	0.65	51
Contractors	2	.22	17
Truckers	2	.22	17
Manufacturers	1	0.11	9
Total	9	0.97	75
Personal Service			
Beauticians	2	0.22	17
Miscellaneous			
Detective	1	0.11	8
Recapitulation			
Professions	701	75.95	5,873
Skilled Trades	72	7.80	603
Agriculture	21	2.17	168
Clerical	118	12.78	988
Business	9	0.97	75
Personal Service	2	0.22	17
Miscellaneous	1	0.11	8
Total	923	100.00	7,729

* In this column the total of 7,729 pupils enrolled in all the Adventist academies in North America have been distributed among the occupations on the same basis as the 923 pupils who stated their vocational plans.

Laurelwood (Oregon), and three California academies--Lynwood, Glendale, and Loma Linda.

It was not the purpose of this investigation to inquire fully into the vocational choices of pupils in the academies. However, since somewhat more than half of the entering freshmen in the colleges and junior colleges come from the academies it was believed that the vocational choices already formed by academy pupils undoubtedly have some influence in the vocational decisions made by college students. Table 17 not only indicates the distribution of this sample of 923 pupils in the academies visited, but also indicates the distribution of the 7,729 enrolled in all the North American academies last year, assuming that the pattern of vocational choices for the entire group would correspond approximately with that of the sampling.

The Appropriateness of These Vocational Choices in Terms of Denominational Beliefs and Attitudes

The distinctive denominational beliefs and attitudes that have vocational implications were discussed at some length in the preceding chapter, and it may be pointed out here that the choices being made, especially by the college students, are in rather complete harmony with these criteria.

Approximately two-thirds of all the college students intend to be teachers, ministers, physicians, or nurses; and even those who expect to be secretaries, accountants, or businessmen have selected vocations for which the denomination has many openings each year. Such occupations as those of the dietitians, musicians, laboratory technicians, journalists, artists, librarians, etc., are all occupations in which the church has some openings and for which it needs qualified persons. Even in the case of lawyers, it is possible that the denomination can use a few of them. It is quite likely, however, that the individuals who expect to enter this profession may be young men with very little concern for the program of the church. In any case, no particular adverse criticism can be made of the choices of college students in the sense of being in conflict with the principles and attitudes of the denomination.

The vocational choices of the academy pupils are somewhat less in harmony with this criterion. For example, there are 14 expecting to be aviators, 9 to be radio technicians, 1 to be a

telephone operator, and so forth. Undoubtedly, the academy pupils have had little opportunity to realize that such occupations would prove difficult for Adventists, or possibly the individuals choosing these occupations had not identified themselves with the spirit and work of the church.

The Appropriateness of These Choices in Terms of Probable Opportunities for Employment

The preceding chapter has indicated that approximately one-half of the students who enter Adventist junior and senior colleges as freshmen may ultimately expect employment by the denomination. This expression was extended to include those who are accepted as students in the denominational medical school and in the official schools of nursing. This fact suggests that a criterion for the evaluation of choices in terms of opportunity should require (1) that not only should the number planning to enter denominational work each year be limited at present to approximately seven hundred, but also the number expecting to enter each line of denominational service should be rather closely related to the number of probable opportunities in that occupation; and (2) that those expecting to enter occupations not connected with the church should not only choose vocations consistent with denominational beliefs as set forth in the preceding sections, but should also choose occupations in which there is reasonable probability of openings, and in which Adventist youth, with their distinctive beliefs and attitudes, will be happy.

Occupations within the Denomination

Teaching.--Table 15 indicates that over eight hundred of the college students plan to be teachers. Comparing this with the estimated needs of teachers as given in Table 4 (page 26), it is evident that, if all these 824 students were to spend four years in college, only about two hundred would be available each year, and unless the tenure of service in the church schools materially increases, there would probably develop a distinct shortage. If, on the other hand, the majority of these teachers spend but two years in college, it is evident that the number in training is more than adequate to the present needs.

The previous chapter has pointed out that because of the conditions under which church-school teachers have worked--and

the same applies to some of the academy teachers--this occupation has not had the holding power that the church desires. It is evident that, if students complete a four-year college course before beginning the profession of teaching, they should not plan to teach for only three or four years or less, but their length of service should certainly be much longer. If the church fully understood the amount of direct and indirect expense involved in the adequate preparation of its teachers, it would realize that it would be greatly to the advantage of the denomination if this could be spread over many more years of service. Now that these matters are coming to the attention of conference and church officials, it is quite likely that the changes already begun will be accelerated, and that the length of service of church-school teachers will be much extended. The result of this would doubtless be that the number of openings would be definitely reduced. In view of this, it is probable that a sufficiently large number of students are now planning to enter this profession.

Ministry.--Some 543 students are expecting to be ministers. Not only so, but there is a definite tendency for this profession to attract students who previously had made other vocational choices. A calculation made from Table 16 (page 71) indicates that whereas less than 12 per cent of the freshmen and sophomores contemplate entering the ministry, 28 per cent of the seniors have made this choice. As there is a total of 325 seniors in the four-year colleges, according to Table 2 (page 11), it may be calculated that some 90 seniors are prospective ministers.

The total number of openings for new ministers was shown in Chapter II to be 45 each year at present. As attendance at the Theological Seminary is largely a matter of "in service" training for those already in the ministry, rather than a requirement for entry into that service, it may be said that the number in training for this profession is about twice as large as the number of openings for full-time employment would seem to justify.

That the church would welcome a large number of "lay-evangelists" is not questioned, but that the present theological curriculum of these colleges offers anything like adequate training for some suitable means of gaining a livelihood for such self-supporting ministers could not be established by the investigation.

Medicine.--Students expecting to study medicine number 538 in Adventist colleges, as indicated by Table 15 (page 70).

Heretofore most of these have taken but two years of pre-medical preparation. The trend now is toward the three-year curriculum, which will become obligatory in September, 1941, at the Adventist medical college.

Because the medical school can accept but 75 students each year, and because of the difficulties encountered by Adventist students in most other medical schools,¹ the number of pre-medical students in the colleges is obviously out of proportion to the opportunities for medical study.

An investigation made at the medical college in November, 1938, showed that of the 250 Adventists who applied at that institution that year, only 30 per cent were accepted. Whether or not any considerable number of these sought and obtained admission at other medical schools was not ascertained.

Nursing.--The five hundred students expecting to become professional nurses appear at first consideration to be excessive, in view of the fact that but 225 applicants are accepted each year by the Adventist schools of nursing. The investigator was able to verify, however, that the nursing schools are barely able to secure the required number of fully qualified applicants each year.

One of the factors is that, although the pre-nursing program is only one year in length, many students spend two years in college before entering the nursing schools. Another is that a considerable number who desire this vocation are not acceptable to the nursing schools.

Some Adventist girls enter other nursing schools, but few of these enroll in the colleges for the pre-nursing program.

Clerical occupations.--Over five hundred students are planning on clerical positions, as accountants, auditors, secretaries, etc., in addition to about one hundred who stated "business" as their vocational choice. Table 14 indicates that only a fraction of this number can expect employment within the denomination's organized program. In the early part of 1939 the Associate Secretary of the General Conference had the applications of more than one hundred accountants, stenographers, and other clerical workers who were seeking denominational employment.

¹See page 34.

The clerical occupations, however, offer many positions for Adventists in non-denominational activities, and if the proper machinery were set up for helping them to find suitable positions outside of the denomination, it is possible that the numbers now enrolled would not be excessive.

Other professions and semi-professions.--If those planning to be dietitians and laboratory technicians are expecting positions within the denomination, certainly no further encouragement should be given the students to choose these occupations. These vocations, however, are typical of several lines of work outside the denomination that are proving to be suitable for Seventh-Day Adventists, and in which they are succeeding. Once it is understood that the denomination may reasonably expect a number of its young people to prepare for and enter these occupations in institutions not connected with the church, there is no reason why a much larger number could not be encouraged to prepare as dietitians, laboratory technicians, etc.

Adventists are having successful experiences in some of the newer fields related to medicine, and it may well be asked why a much larger number of Adventist students should not plan to enter such occupations as dentistry, social service, and public health work, and should not plan to become optometrists, opticians, veterinarians, psychiatric nurses, and so forth. Other lines not related to health in which Adventists are finding success are such occupations as advertising, commercial art, and interior decorating.

Non-Denominational Occupations

Evidence has been introduced indicating that not more than 30 per cent of the young men who enroll in Adventist colleges may reasonably expect full-time employment in the church and its institutions. While the proportion of young women who will enter the service of the denomination is much larger, their probable tenure of service is correspondingly shorter.

If, then, the majority of Adventist students must seek openings in occupations unrelated to the church, it is in order to evaluate their occupational choices somewhat by comparing the range of their choices with the distribution of occupations in the nation as a whole. The Adventist, however, deviates from the typical person, vocationally speaking, and so a still more signifi-

cant comparison may be made by comparing the occupational expectations of the Adventist students with the distribution of their own parents among the occupations of the nation. Table 18 and Figure 7 make these comparisons, based on the seven groups of occupations used for classifying the 5,386 Adventist families.

TABLE 18

OCCUPATIONAL EXPECTATIONS OF 2,061 STUDENTS IN ADVENTIST COLLEGES COMPARED WITH THE OCCUPATIONAL DISTRIBUTION OF (1) THEIR PARENTS AND (2) ALL EMPLOYED PERSONS IN THE UNITED STATES

Occupational Groups	Percentage of students Expecting to Enter Each Group ^a	Percentage of Employed Persons Engaged in Each Group of Occupations	
		Percentage of Parents of Adventist Students ^b	Total Population in U.S.A. ^c
Professions . .	80.39	18.86	5.64
Clerical Work .	13.64	2.77	7.81
Business . . .	3.54	13.91	12.37
Agriculture . .	1.36	27.18	22.38
Trades	1.07	21.74	24.22
Miscellaneous .	...	10.95	22.66
Personal Service	...	4.59	4.92
Total	100.0	100.0	100.0

^aSee Table 15, p. 70.

^bSee Table 13, p. 61.

^cBased on Brewer's classification of occupational data from the 1930 census (J. M. Brewer, Occupations, pp. 592-95. Boston: Ginn & Co., 1936).

The most striking shift in vocational intention concerns the professions. It may be somewhat surprising to find that whereas only 5.64 per cent of all employed persons in America in 1930 were engaged in one of the occupations included in this group, 18.86 per cent of the parents of students in Adventist colleges are so occupied. But the fact that 80.39 per cent of the students intend to enter these professions certainly calls for special consideration.

Further examination of Table 18 does little to relieve the concern occasioned by the data regarding professions. If professions and clerical work are combined, it is apparent that 94 per cent of the students are included, whereas only 13.45 per cent of

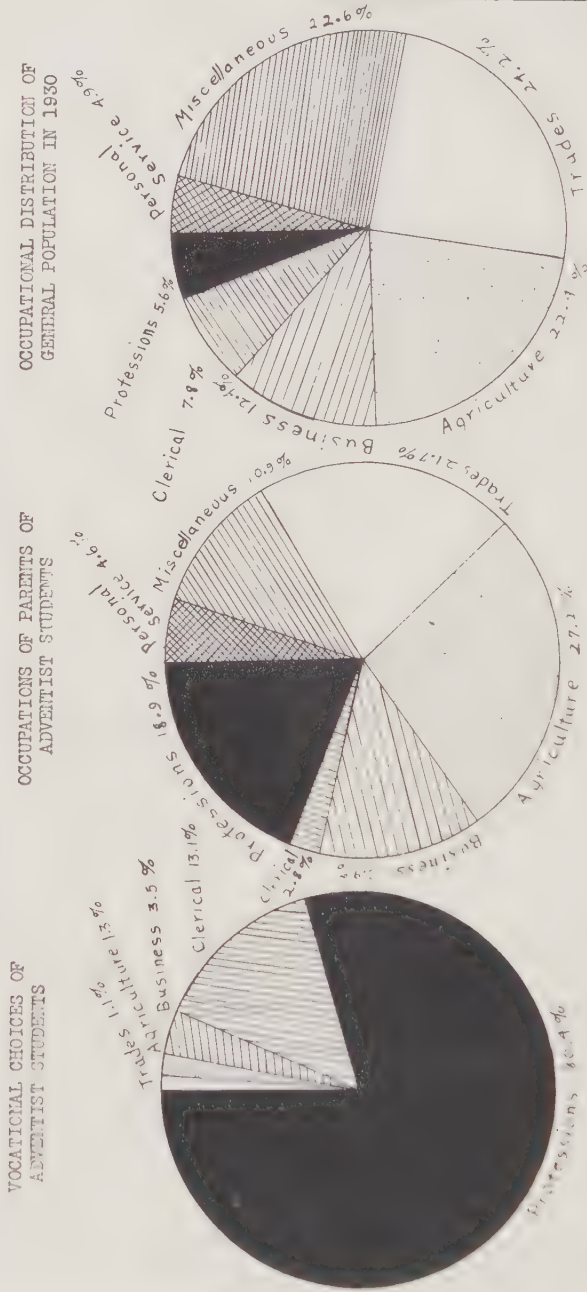


FIG. 7.--The vocational choices of students in Adventist colleges in contrast with the occupational distribution of (a) their parents and (b) all employed persons in the United States.

The circular graph to the left shows that 80.4 per cent of the students in Adventist colleges expect to enter the professions. The center graph shows that but 18.9 per cent of the parents of these students are engaged in these professions; and the graph to the right indicates that in 1930 only 5.64 per cent of all employed persons in the United States were so occupied.

the general population are so occupied, and only 21.63 per cent of their parents.

Some connected with these colleges would justify these shifts by saying that students go to college for the purpose of doing this very thing--to get out of the trades and agriculture and into the professions and clerical work. Studies made in other colleges also suggest that this is not a situation limited to the Adventist institutions.

Further, it may be pointed out that this shift in occupations is somewhat more apparent in these data than real, since only about one-fourth of the Adventist youth are in college, and since some of these changes are in accordance with national trends, as for example, the constantly decreasing proportion of the population engaged in agriculture and the constantly increasing number engaged in the professions and in clerical work.

There are, however, other factors which should not be ignored. For one, the fact that the ratio of students in higher education to total population is more than twice as high among the Adventists as in the general population in America does not necessarily require that Adventists should furnish twice as many professional and clerical workers, proportionately as the rest of the population.

Again it may be assumed that the social and economic changes taking place in America that affect the occupational outlook of other youth are not without their implications for the Adventist youth as well. The up-grading of occupations going forward today on a broad front is illustrative of the changes to which reference is made. Within a generation, occupations of relatively low estate--as, for example, nursing and dentistry--have taken their places among the recognized professions. At the moment, a number of other occupations are moving in the same direction. Already the junior colleges have begun to apply such titles as "technicians"¹ to those who in such fields as engineering, chemistry, mining, agriculture, aeronautics, and the like, have completed at least two years of college work on what is known as the semi-professional level.

Because the high-school graduate no longer finds an easy and immediate entrance into desirable vocations, the junior col-

¹Junior College Journal, May 1, 1939, p. 460.

leges and lower divisions of four-year institutions and universities are enrolling large numbers of youth who in the past would have gone directly into the trades, agriculture and similar occupations, and although many of these at entrance hope to find their way into the professions, there seems little likelihood that the ambitions of all will be realized.

Recognition of these facts by the Adventist students and their counselors might suggest the desirability of many of these students considering a much wider range of vocations than their present choices indicate.

The Vocational Problem in Academy IA-16

Figure 8 is a graphic illustration of the problem of guidance as it exists in the academies. With one or two exceptions, which will be pointed out immediately, the situation in IA-16 is not very different from that in any of the other academies. It illustrates the present lack of information that exists in the minds of the pupils, and possibly also in the minds of their teachers, as to the opportunities open to Seventh-Day Adventist youth.

Academy IA-16 is an independent school in that it is not attached to any of the colleges. It is, however, located close to one of the medical institutions, which probably affects the pattern of the choices among the professions. It will be noted that, whereas in this particular academy ten of the parents are ministers, not a single pupil plans to enter the ministry. This fact is unusual and not typical of the academies in general. It is also apparent that in this particular academy, half of the pupils plan to be either physicians or nurses. This undoubtedly was due to the influence of the medical institution.

Academy IA-16 is, however, representative of all the academies, as is apparent from Table 18, as far as the shift of pupils from the occupations of their parents to the professions is concerned. It will be noted that at this academy all the pupils are planning for professional or clerical work except six. Five of these expect to be aviators or airline hostesses. In the minds of these pupils, aviation doubtless ranks as a fully developed profession; and airline hostesses are also professional nurses. It may be stated, then, that although the majority of the parents are engaged in agriculture, the skilled trades, personal service, and business, all of the children but one expect to enter the professions or clerical work.

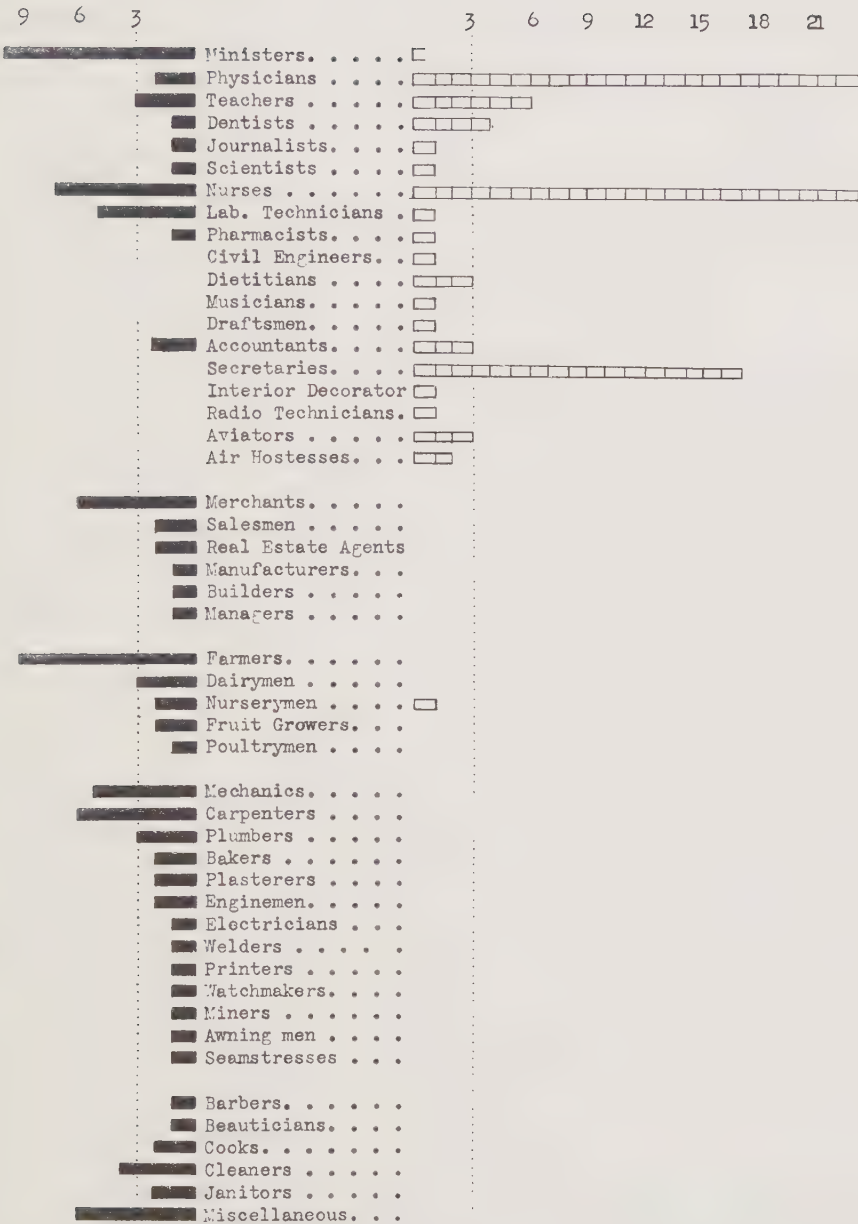


Fig. 8.--A guidance problem in the academies

The occupations of the parents of the pupils in Academy IA-16 are shown by the solid bars to the left. The rectangles to the right indicate the number of pupils that expect to enter each occupation.

The Appropriateness of the Choices in Terms
of Scholastic Ability

Reference has just been made to the fact that nearly 94 per cent of the Adventist students are planning either to enter a profession or to engage in clerical work. In fact, 67 per cent of all these students expect to be either ministers, teachers, nurses, or physicians. That the overwhelming majority of these students should limit their choices to such a narrow range of occupations is doubtless due primarily to a serious misunderstanding on their part as to the relative number of openings in these occupations and to a lack of information in regard to other suitable occupations. That little consideration is being given to the relation of the scholastic ability of these students to their occupational choice is, in the opinion of the investigator, another factor to which serious attention may well be given.

An attempt at the evaluation of the vocational choices of Adventist students in terms of their scholastic ability will be made by inquiring into the following: (1) the general scholastic ability of Seventh-Day Adventist students; (2) the ability of the members of each group expecting to enter some definite occupation; (3) the relationship of ability to student mortality in Seventh-Day Adventist colleges.

The Measure of Ability Used in This Study

Nearly all of the Adventist colleges have recently begun the use of the psychological examination of the American Council on Education and in two of the colleges this measure has been used for a number of years. It was decided that in view of the fact that this is the most widely used of any measure of the scholastic ability of college students; that the norms as established each year are based on returns from over 300 colleges and nearly 70,000 students, and that this measure has been used repeatedly and successfully for the prediction of success in college, no other available measure would be as suitable.

The investigator desired to combine with this measure of mental ability the percentile rank of each student in his high-school graduating class, but it was soon discovered that in the case of most of the colleges this information was not available. In the case of others, the rank was recorded only by thirds of the graduating class.

It was decided not to use grades made by students, since in the case of freshmen there were no grades available; and further, the schools had no common basis for the distribution of grades. That is, some institutions gave a much higher number of "A's" and "B's" than other institutions. Furthermore, the purpose of the investigation was to measure the potential ability of students, rather than their achievement.

Since it was not desired to compare the students with each other, but with college freshmen in general, it was evident that the national norms on the psychological examination of the American Council on Education--that is, the norms based on the nearly seventy thousand students whose scores are reported annually--would be the most reliable measure available. Accordingly, the score made by every student for whom a measure was available was converted into a percentile rank (national norms) on the American Council test. In the case, then, of a student with a percentile rank of 10 it is to be understood that that student equals or surpasses in scholastic ability 10 per cent of the freshmen whose scores were reported that year. A percentile rank of 50 would mean that the student equals or surpasses in ability 50 per cent of these freshmen, and so with the other scores.

The Measurement for Upper Classmen

The examination which has been used as a yardstick is ordinarily given to freshmen as they enter college, and it is not repeated again in later years. A senior-college student with a percentile rank of 40 is to be understood as a student who in scholastic ability surpassed 40 per cent of college freshmen at the time of entrance. No comparison is made as to how this student stands in relationship with other college seniors, since he is always compared with the group of freshmen at the time of entrance. It is hardly necessary to add here that no injustice is done upper classmen in this way, since if the test does measure native abilities there is no reason to assume that these abilities would fluctuate to any large degree.

The Ability of Students in the Adventist Schools

In the course of this investigation measures were obtained for 1,907 students in the senior and junior colleges, 797 pupils in independent academies, and 511 pupils in academies attached to

colleges, the entire number being 3,214. In addition to these students, all of whom were in attendance in October, 1938, the investigator secured additional scores of students in Adventist colleges in recent years. However, since these additional scores did not contribute any additional information, with the exception of indicating trends, they have not been used except for that purpose.

Table 19 indicates the scores obtained in the institutions studied. The first column gives letters and numbers assigned to each institution. This was for the author's convenience, since it was felt that the identification of the schools should be withheld. This is not an alphabetical arrangement, and no clue is given as to the identity of the institutions. The second column indicates the number for whom scores were obtained.

The scores of some students in several of the colleges were those made on the Otis S-A Higher Examination before the institutions began the use of the American Council on Education test. These scores were converted in percentile ranks by using the norms for college students given by Otis¹ in the manual for that mental test. In one of the junior colleges the measures available were the percentile ranks (college entrants) on the Sones-Harry High School Achievement Test. The norms for "college entrants" as given on page 9 of the Manual of Directions were used. As these were established by 1,156 cases, they were accepted by the investigator as equivalent to the national norms of the American Council test. Otherwise, all the scores for college students are percentile ranks (national norms) on the American Council on Education Psychological Examination.

In one respect, at least, all the colleges but one are identical: their students are distributed from the lowest to the highest percentiles; the one exception is the junior college in which the Sones-Harry examination was used. There is, however, some variation in abilities from school to school. College SC-6, with a median percentile of 52, is the highest. This college, however, had a relatively small freshman class this year, and a relatively large retention of former students.

¹Arthur O. Otis, Self-Administering Tests of Mental Ability, Manual of Directions and Key (Revised), p. 4. New York: World Book Company, 1928.

TABLE 19

SCHOLASTIC ABILITY OF STUDENTS IN SEVENTH-DAY
ADVENTIST SCHOOLS - BY INSTITUTIONS

Institutions	Number	Measures of Ability ^a			
		Range	Q-1	Mdn.	Q-3
SC-1	239	1-99	21	36	59
SC-2	249	1-97	21	42	68
SC-3	374	1-97	18	35	52
SC-4	360	1-99	26	48	71
SC-5	127	1-98	17	37	63
SC-6	290	1-99	32	52	80
JC-7	82	1-99	30	46	71
JC-9	186	1-91	23	37	50
Total - 8 Colleges . .	1907	1-99	24	42	65
IA-10	184	76-133	100	105	113
IA-11 ('38 Freshmen)	88	66-131	90	99	108
IA-11 ('37-'38 Total)	193	69-137	94	102	110
IA-12	109	71-132	95	103	109
IA-13	93	70-131	96	103	111
IA-15	129	72-134	99	106	113
Total-5 Independent Academies	796	66-137	96	103	111
DA-17	158	79-139	95	102	110
DA-18	79	85-132	107	110	121
DA-19	76	79-123	96	103	113
DA-20	73	85-129	100	109	116
DA-21	78	74-142	91	100	108
DA-22	47	73-130	99	108	114
Total - 6 Dependent Academies	511	73-142	98	106	114
Total - All Academies . .	1,307	66-142	96	103	111
Grand Total - All Institutions	3,214				

^aThe measures used for college students are percentile ranks (national norms) on the psychological examination of the American Council on Education. For academy pupils, the measures are intelligence quotients established by the Otis S-A Higher Examination.

The sampling was extended to all the senior colleges and to two of the junior colleges. It included over 1,900 students, and without doubt, the summary correctly represents the ability of students in Adventist institutions. The interpretation may be stated thus: In terms of relative scholastic ability as compared with the freshmen of all American colleges, the 1,907 students in the Adventist colleges ranged from those with the lowest ability to those with the very highest. The median Adventist student--that is, the one who exceeded in ability 50 per cent of his fellow-Adventist students--exceeded in ability only 42 per cent of the 70,000 freshmen who take this examination each year. In the same way, the Adventist student who exceeded 25 per cent of his fellow-Adventist students (Q-1) exceeded only 24 per cent of the freshmen in general. The student who exceeded 75 per cent of the Adventist group (Q-3) exceeded only 65 per cent of freshmen in general.

These figures are somewhat misleading, since they include upper classmen in Adventist colleges as well as freshmen, and for this reason they were divided into college years and the data are presented in Figure 9. It will be noted that, whereas the median for the freshmen is only P. R. 38, the median for seniors is P. R. 61, due to the elimination of the weaker students. Since these measures, as has been pointed out, are always based on the norms established by freshmen, and since the median Adventist freshman has a percentile rank of 38, it is apparent that more than three-fifths of the entering freshmen in Adventist colleges are in the lower half of scholastic ability as compared with the freshmen whose scores are reported by the American Council test.

Ability of Academy Pupils

Since somewhat more than half of the entering freshmen in Adventist colleges come from the academies supported by the church it was thought that a sampling of ability in the academies would be of value. It will be noted that of the 796 pupils in the independent academies, the median I.Q. was 103, and that the pupil who exceeded 75 per cent of all his fellows (Q-3) had an I.Q. of 111. Now if it is assumed that this degree of mental alertness (I.Q. 111) represents approximately the median of ability of college freshmen¹--that is, percentile rank 50--than only pupils in

¹Otis, op. cit.

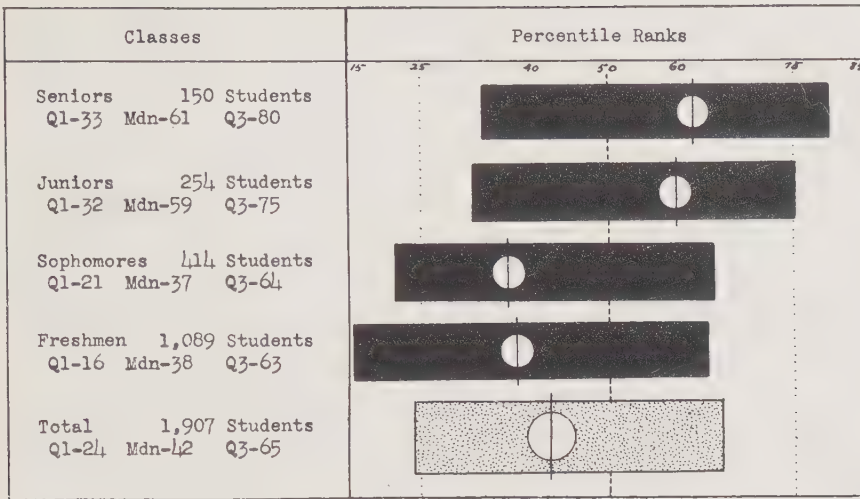


Fig. 9.--The scholastic ability of the students in Seventh-day Adventist junior and senior colleges by classes.

This graph shows the median and the range in percentile ranks (national norms) of the middle 50 per cent of the 1,907 college students for whom measures were obtained in October, 1938. Since the examination is given the students when they enter as Freshmen, the relatively higher standing of the students in the upper biennium is due entirely to the rapid elimination of the less capable students in the lower biennium. (Psychological Examination of the American Council on Education).

the upper quartile in the academies, in terms of ability, are "above average" college material.

A relatively larger sampling was taken among the dependent academies, since these data were readily accessible. It will be noted that the pupils in these institutions represent a somewhat higher ability group than in the independent academies. This is, of course, explainable by the fact that some of them are the children of professional people and of others who moved to the college communities in order to give their children these advantages. This group, therefore, naturally is somewhat selected, which accounts for their greater ability. Since practically all the other academies in North America are independent, it may be concluded that the median intelligence quotient of the academy pupils is about 103,¹ or about typical for the average high-school pupils

¹Mr. E. L. MacDonald, of South Lancaster, Massachusetts, has done some testing recently in the following academies: South

throughout the country. This would seem to imply that the youth of the Seventh-Day Adventist families are about typical in mental ability of the country as a whole, and that the reason they make an unfavorable showing on the college level is that more than twice the usual number attend college and professional schools.

The question will naturally be raised by some as to whether the national norms of the American Council test are the actual norms for all the nearly 400,000 freshmen who enroll in American colleges and universities each year. Some hold that, since only about half of the colleges use the test, those that do are the better institutions. It is further contended that, since only 70,000 returns are received concerning the 200,000 who write on the test, selection has again taken place so that a given percentile rank cannot literally be considered a "national norm," but simply a norm established by a somewhat selected group of about one-sixth of the total freshmen of the nation.

It is pointed out, nevertheless, by others closely associated with this examination that some very inferior schools do report each year and that many superior schools do not. Those who hold this view are convinced that were the test to be given to every freshman in America the norms would not be much different. In other words, they regard the 70,000 whose scores are reported as a representative sampling of the entire group.

In support of this point of view, it may be mentioned that in the Preliminary Report¹ on the 1938 edition of the test sent out under date of November 14, 1938, a score of 90 established a percentile rank of .496 and that in the final report² published in April, a score of 90 gave a percentile rank of .505. The first was based on 10,494 students; the final report was from 356 colleges and was based on the scores of 61,821 students. This fact

Lancaster (Mass.), Union Springs (N.Y.), Greater New York (N.Y.), Brookside Junior (Mass.), Takoma (Md.), and the New England Sanitarium (Mass.). In a personal letter, dated December 28, 1938, he reports his findings as follows: "Number of pupils, 526; Mean (I.Q.), 108; Q-1, 99; Q-3, 117." These data correspond with those given above for some of the "dependent academies." Some of Mr. MacDonald's academies are "dependent" schools.

¹Preliminary Report of Norms, Psychological Examination for College Freshmen, 1938. Washington, D.C.: American Council on Education, 1938.

²"The 1938 Psychological Examination," The Educational Record, April, 1939.

strongly suggests that the extension of the test to more students does not seriously affect the norms. While the investigator's personal opinion is that, if and when the true norms are eventually established, they may indicate that the present norms are based on a slightly selected group, it has seemed that for the purpose of this investigation it would be unsafe to assume that the real norms are other than the national norms as published by the American Council. Any assumption of this kind would be incapable of factual support. Nevertheless, the reader is certainly entitled to interpret the data presented concerning these Adventist youth in the light of this possibility.

The reader will have noted in Figure 9 that the median sophomore stood one percentile lower than the median freshman. The investigator is not certain that all the factors which entered into this are apparent. An analysis of the data revealed that in the case of senior colleges alone, the median percentile rank for freshmen was 36, while for sophomores it was 37. In the case of one of the larger junior colleges, however, no data were available for the sophomores, and in the case of both the junior colleges, the median ability of the freshmen was higher than for those in the senior colleges. It is probable that, if the data for the sophomores in this junior college had been available, the median of sophomore ability for the entire group would have been raised by one or two percentiles.

Figure 10 presents data of the entering freshmen classes in college SC-6 since 1933-34. It is interesting to note that in September, 1933, only 113 freshmen entered this college, and the median percentile rank of the group was 58. From then on, to 1937-38, the size of the entering freshman class increased rapidly, and as the size of the class increased, the median ability dropped, until in 1937-38 there were 193 freshmen, and the median percentile rank was 37. In September, 1938, however, the number of entering freshmen dropped to 162, and the median percentile rank increased to 48.5.

In two other senior colleges, a similar investigation was attempted. The data were not so complete and are not reproduced here. It may be stated, however, that in both of these cases, it was apparent that when the number of entering freshmen increased, the ability of the students dropped. In one college, this was especially apparent, when the number of freshmen accepted one year

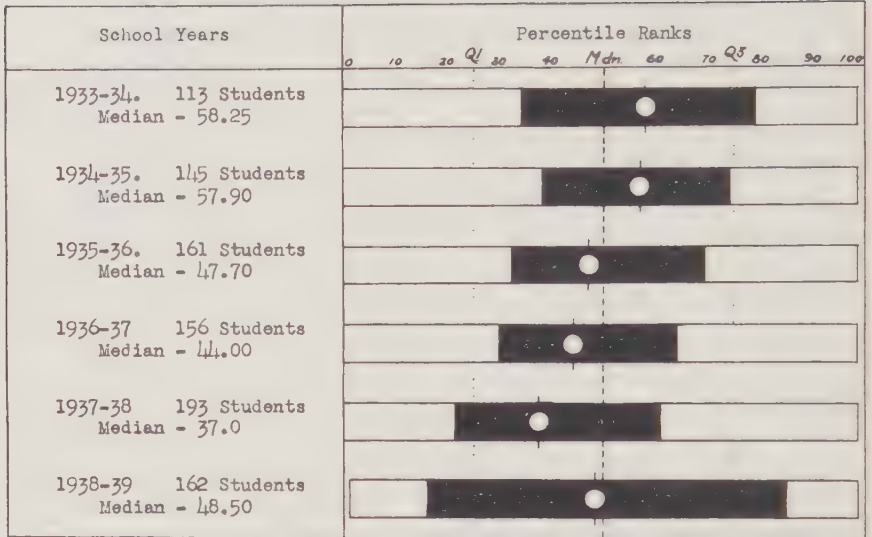


Fig. 10--Fluctuations in relative ability of entering Freshmen

The bars indicate the range, median, and quartiles of each group of entering Freshmen at College SC-6 from 1933 to 1938. The distribution of scores in each group is shown in relation to the national norms of the Psychological Examination of the American Council on Education.

was nearly 70 more than for the previous year. The median percentile rank in this case dropped from 37 to 32. The investigator did not find any instance of an opposite trend. If it is assumed that a given percentile rank on the American Council test represents from year to year a constant amount of ability, then it may be inferred that as the schools extend their recruiting activities, and increase the size of their freshman classes, they bring in more students of lower scholastic ability.

Figure 11 shows the place on the ability scale earned by each 1937-38 freshman of College SC-2. This year was one of rapid growth for this institution, whose industries attracted many students seeking opportunities for self-support.

Measures of central tendency for the entire enrollment are insufficient for the purpose of guidance. It was, therefore, decided to study both the freshmen for whom measures were available and the seniors in greater detail. Figure 12 shows the number of freshmen and the number of seniors in each ability decile. That is, the lowest decile represents students whose percentiles were

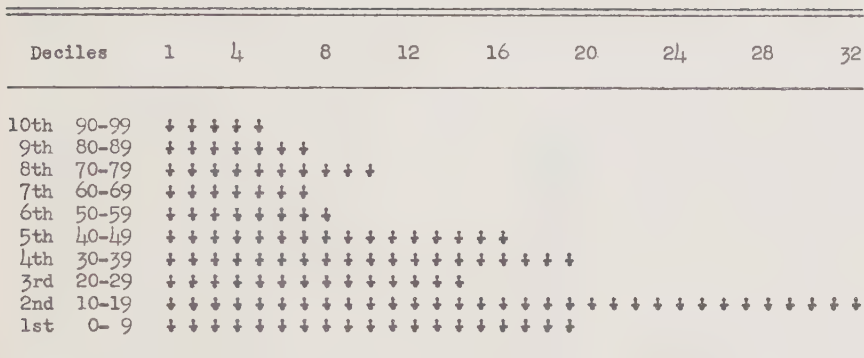


Fig. 11.--Scholastic aptitude ranks of the 1937-38 entering Freshmen in College SC-2.

Each of the 137 Freshmen is shown in the decile (national norms) to which his score on the Psychological Examination of the American Council on Education would classify him. Entering Freshmen of 1938 in two other senior colleges were no higher. Data for the group above: N - 137, Q1 - 15, Mdn. - 32, Q3 - 64, Range 1-99-.

0-9, whereas the highest decile represents percentiles 90-99 inclusive. In Figure 13, these same data are presented as percentages of each of these groups. That is, in the case of the freshmen, the lowest decile indicates the percentage of the freshman class found in the lowest decile, and so for each of the deciles for both freshmen and seniors, Figure 12 not only indicates graphically the large elimination of freshmen that takes place before they become seniors, but also indicates that this elimination is much higher in the case of students of low ability than in the case of those with greater ability.

Abilities of Groups Expecting to Enter the Professions

The information so far presented is of interest as a basis for the formulation of legitimate objectives for the institutions, in view of the abilities and consequent needs of their student bodies. It has contributed no light, however, toward the evaluation of specific vocational choices being made by different groups of students. Of the 1,907 students for whom definite measures of scholastic ability were available, 1,575 had definite vocational plans. In Table 20 these are listed, together with data concerning the ability of each group. These data are graphically pre-

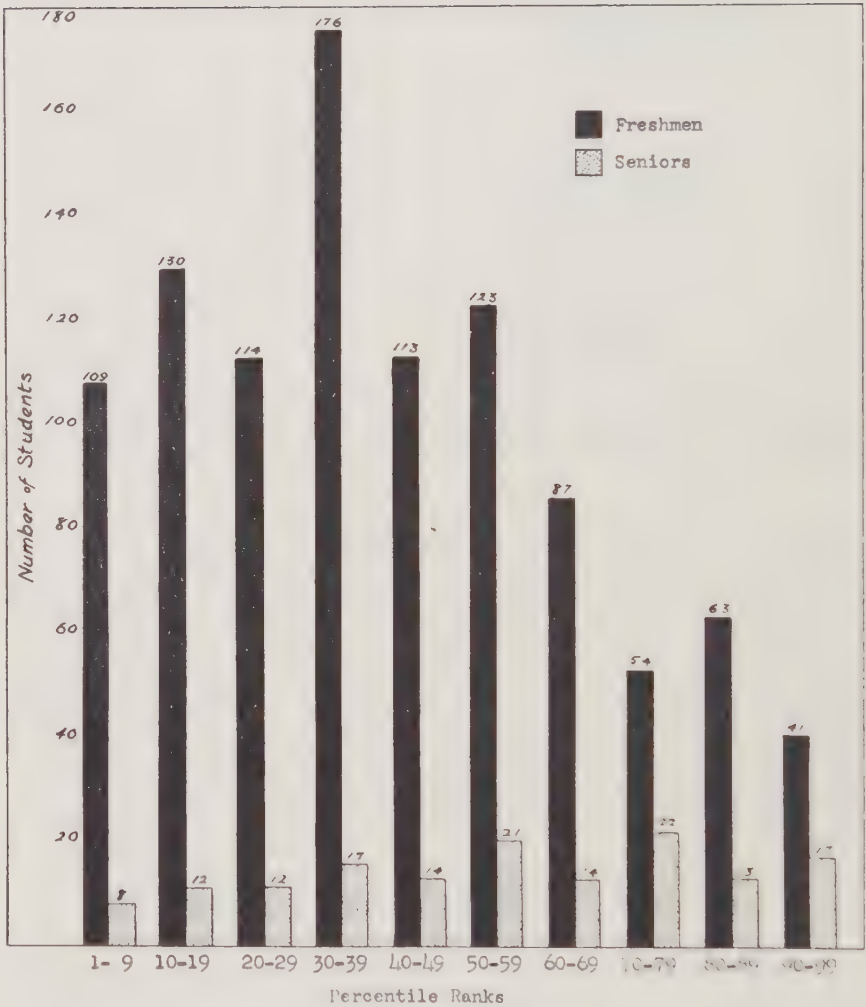


Fig. 12.--Freshmen and Seniors in each decile (national norms) of scholastic aptitude in the Adventist junior and senior colleges.

Obviously only those for whom measures were available are included in this figure. It is assumed that the other members of each of these groups are of corresponding ability.

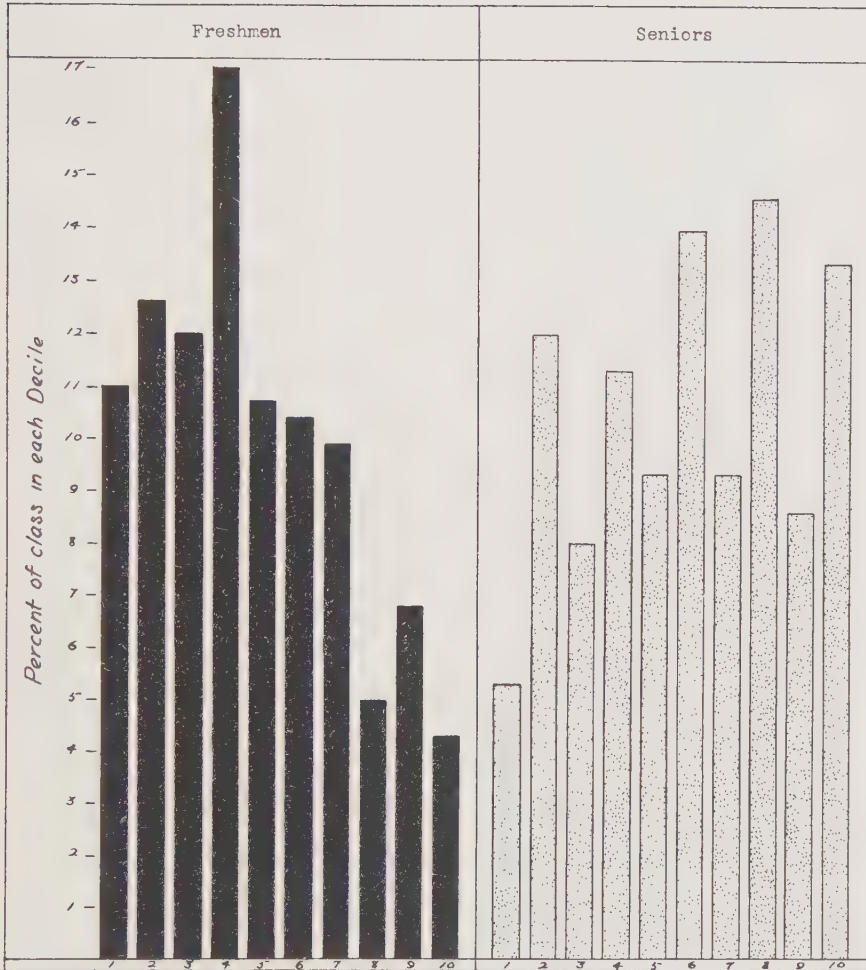


Fig. 13.--Percentages of Freshmen and Seniors in each decile of scholastic ability.

Decile "1" shows the proportion of Freshmen (and Seniors) whose percentile ranks ranged from 1 to 9.9 on the American Council examination. Decile "10" indicates the percentages of each of these classes whose percentile ranks ranged from 90 to 99+.

TABLE 20

SCHOLASTIC ABILITY OF STUDENTS IN ADVENTIST COLLEGES
CLASSIFIED ACCORDING TO THEIR VOCATIONAL INTENTIONS

Occupations	Total	Number With P.R.	Range	Q-1	Mdn.	Q-3
Librarians	3	3	92-95	92	94	95
Scientists	24	20	7-90	49	73	82
Lab. Technicians	21	21	5-99	31	59	80
Journalists	20	16	1-84	38	58	78
Physicians	307	224	1-99	32	52	73
Musicians	27	19	1-85	32	45	75
Accountants	55	37	4-98	29	45	68
Engineers	17	11	8-85	21	44	51
Ministers	310	196	1-98	28	43	67
Misc. Professions	29	17	29-94	34	40	59
Lawyers	7	6	1-78	16	42	61
Teachers	467	401	1-99	23	41	64
Business	73	55	0-99	21	41	59
Dentists	30	24	5-98	22	38	58
Secretaries	215	161	2-98	19	38	56
Bible Workers	58	39	1-87	19	38	52
Nurses	303	261	2-98	18	37	60
Dietitians	45	38	2-92	21	35	64
Trades and Agriculture	50	31	4-97	9	33	59
Grand Total	2,061	1,575	1-99	34	48	65

sented in Figure 14. It will be noted that they are placed in rank order, the group with the highest ability coming first. Only three of this large group were expecting to become librarians, but these were all students of very high ability.

Medicine.--The first of the large groups is of those expecting to become physicians, of whom there were 224. Approximately 48 per cent of this group are in the lower half of ability as compared with the college freshmen whose scores are reported

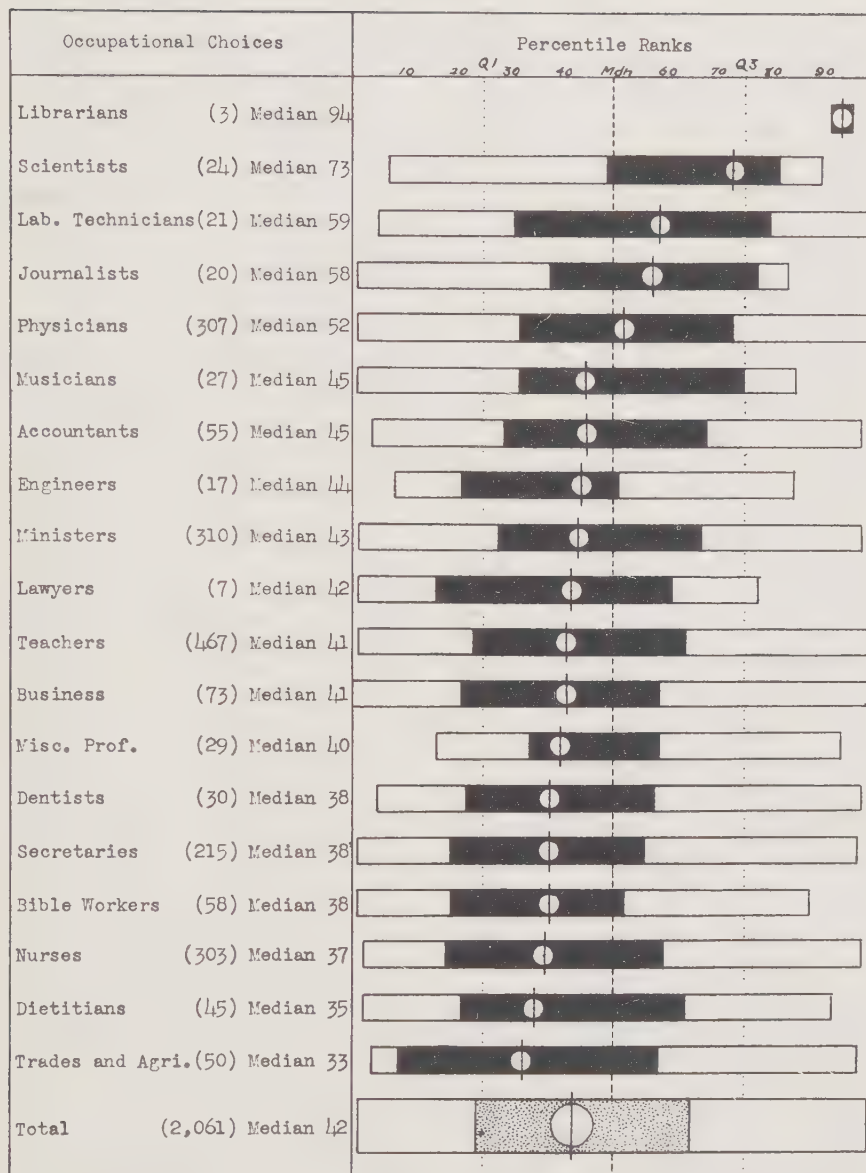


Fig. 14.--Scholastic aptitude versus vocational choices --1,575 students in Adventist colleges in 1938-39.

Measures of scholastic aptitude were available for only 1,575 of the 2,061 students who stated their vocational plans.

to the American Council. It will be further noted that they dropped as low as percentile rank one, and that 56 of the 224 were in percentile ranks 1-32.

Each year approximately 400,000 freshmen¹ enter institutions of higher learning in the United States. Each year over 12,000² apply for admission in the 77 medical schools in the United States. In terms of percentage, only 3 per cent of those who enter as freshmen apply later to the medical schools for admission. Of the 12,000 who apply, only about 6,000 are finally accepted. Of these 6,000, over 1,000 will be eliminated because of unsatisfactory scholarship, so that only 5,000 will complete their courses. In other words, of the 400,000 who enter the institutions of higher learning, only 1.25 per cent enter and complete the medical course.

Other learned professions, as for example engineering, law, the ministry, and teaching, also attract some of the nation's students with high scholastic ability. But it is also true that the numbers entering these professions are very limited, except in the case of teaching, and, as is known, there are many levels of ability in this profession and only a comparatively few succeed in entering those teaching positions that require the greatest ability.

That a larger number will be interested in medicine than is true for the nation as a whole is to be expected, for the reason that Adventist youth are not much concerned with law and engineering, but the fact that a larger proportion are interested in medicine does not lower the hurdles. The program of the College of Medical Evangelists is, and must continue to be, as rigorous as that of the other high-grade medical colleges. If it were not, the medical students could not pass the National Board examinations, as is required,³ and the State Board examinations. Since the Seventh-Day Adventist medical student must compete with a

¹Abridged Statistics of Higher Education, 1935-36, p. 4. Bulletin, 1937, No. 2. Washington: Government Printing Office, 1938.

²Fred C. Zapfee, "Study of the Accomplishments of the 1936 Freshman Class in Seventy-eight Medical Colleges in the United States and Eight Medical Colleges in the Dominion of Canada," Journal of the Association of American Medical Colleges (March, 1938), pp. 130-141; (May, 1938), pp. 196-208.

³No student is granted a diploma by the College of Medical Evangelists until he has successfully passed all three parts of the National Board Examination.

highly selected and competent group of students, it is obvious that only those with superior scholastic ability should be encouraged to plan on this profession. Students of low ability are almost certain of rejection by the medical school.

It may be argued that superior scholastic ability is certainly not the only prerequisite for success in medicine, and possibly not the most essential. There is no absolute proof that it is. Those who select medical students must, however, avail themselves of such procedures as are practicable. Superior scholarship is at least one very important characteristic of the successful medical student, and it is a quality that can be measured with some degree of objectivity. As this cannot be said of certain other characteristics that conceivably may be as important as scholarship or even more important, this measure is likely to continue for many years as the most usable criterion for the selection of medical students.

The medical school is not injured by a surplus of low ability students that it will reject. It is the student who has been led to make this unsuccessful attempt who feels the shock. Data already presented indicate that at least twice as many Adventist students are planning on medicine as can be accepted by the Adventist medical school. If it may be assumed, for the purpose of illustration, that the percentile scores of the students planning to study medicine, as indicated by Table 20, are in harmony with the other measures of ability and suitability for the medical course, it is evident that if all the students below the median were advised to plan for other occupations, the ability of the remaining students would be none too high.

It may be interesting, in this connection, to inquire as to just what the situation is at the school of medicine as regards the ability of the Adventist students who desire to enroll. By the opening of the 1938-39 school year, 250 Adventist students had made application. When these applicants were evaluated in terms of (1) their scholastic record in the premedical studies, (2) their standing on the medical aptitude test, and (3) the recommendations of the college faculties as to their fitness for the medical profession, it was found that only 98 students passed the minimum requirements for entrance. Since some of these 98 could not enter because of financial and health reasons, when the medical college

opened with 75 freshmen, it had accepted all the fully qualified Seventh-Day Adventist candidates.

As to medicine, it may then be definitely stated that not only are the faculties of the several colleges admitting to pre-medical curriculums twice as many students as can be accepted at the medical college, but about half of those matriculated in this curriculum are probably incapable of meeting the difficult requirements of the modern medical program of study.

While no implication is intended here that there exist at the present time perfect criteria for determining a student's aptitude for the study of medicine, it is the belief of the investigator that the judicious use of such means as are available would result in the guidance of many students away from the premedical curriculums who are almost certain to fail of admission to the medical college.

The completion of the premedical studies, on the other hand, does not necessarily mean wasted years to the one rejected as a medical student. Some students are able to readjust their ambitions and maintain confidence in their ability to succeed in spite of a defeat of this kind. The belief of the investigator is that the number of tragedies in this area might be greatly reduced if all the factors were clearly understood by both the student and adviser.

Ministry.--What has been said about physicians applies to a large extent to the next large group, representing those who plan to enter the ministry. It has already been pointed out that about twice as many students are planning on this profession as can be used by the denomination, which fact of itself suggests the need of selection. The question of an over-supply of ministers is not, however, so serious a challenge to the church as is that of the quality of its ministers.

It is not the purpose of this thesis to discuss the policies of the denomination so far as leadership is concerned. It is sufficient to state the simple fact that the leadership of the church has been confided very largely to its ministry. The presidents of the General Conference, and of the division conferences (South American, Australasian, South African, etc.) are all ministers. The presidents of all the union conferences and the presidents of all the local conferences are likewise ministers. Also, chairmen of all institutional boards and the like are ministers.

In fact, there is, so far as the investigator knows, no large administrative unit in the denomination which is not presided over by a minister.

The church has placed its present administration and its future policies definitely in the hands of the ministers, and it is reasonable to expect that the church should set up machinery whereby the most capable and promising of its youth would be chosen for that profession. It is evident from Table 20 (p. 96) and Figure 14 (p. 97) that some of its most competent young men are choosing the ministry. That a large number of young men of very limited ability are likewise choosing the ministry is also clear. Since twice as many are planning on this vocation as the denomination requires at present, it is possible that, if those of low ability in this group were advised to prepare for other more suitable occupations, the church would still have plenty of ministers.

There are those within the Adventist church who feel that the minister must be selected on the basis of what they term "spiritual" qualities. Others, both within and without the church, would assign to so-called "social intelligence" a place even higher than scholastic ability in the selection of the prospective minister. No table of statistical data can be presented to settle this question so far as it relates to the Adventist church. The investigator was naturally unable to obtain the I.Q.'s or percentile ranks of the Adventist ministers, whether successful or unsuccessful. It was possible, however, to obtain the scores for a number of the children of Adventist ministers who are pupils in academies and students in the colleges. Some of these students were of only average ability and a few were decidedly inferior as judged by this measure. The large majority of these children of ministers, however, were of above average ability and the number of superior students was sufficiently high to attract the investigator's attention on several occasions.

While no study was made of the question of whether or not the quality of the ministry is improving or declining, the investigator was impressed repeatedly with the fact that the superior sons of ministers had chosen medicine and certain other professions rather than the ministry.

Nurses.--Only a few of the more typical occupations will be used as illustrations, since it does not seem necessary to discuss each one in detail. It has been pointed out that although

more students are planning to become nurses than the schools of nursing can accept, there is nevertheless an actual shortage of student nurses with the proper ability and training.

It will be noted that the percentile rank of the median prospective nurse is given at 37. There were 91 students, in one school visited by the investigator, who were planning to be nurses. These students had been given the Otis test of mental ability and their scores translated into I.Q.'s. It was found that the median I.Q. of the group was 106. The investigator inquired of the staff of the school of nursing which most of these students were planning to enter, and received this reply in substance:

The situation in the college does not trouble us. It is not our responsibility. From the upper half of that group of girls we shall select our freshman nurses for the next class. Since some are taking two years, the number is not too large. What becomes of those in the lower half is a problem with which the college must wrestle and not the school of nursing.

A number of the young women planning to be nurses stood well up in the upper decile of ability, and some students were found in the nursing schools with I.Q.'s recorded as high as 142. Although these individuals had been highly recommended by the faculties as competent students for the schools of nursing, it had become evident to the girls themselves, and to the instructors in the nursing schools, that students with this degree of mental alertness are not adapted to nursing in the ordinary use of the term. One of these students explained her view to the investigator in these words: "The very thought of spending day after day with the same patient would be like a sentence to jail unless I could make of the patient some type of laboratory experiment in which I could become interested." Some of these young women had decided to train for some of the administrative positions in nursing, or to prepare for research, social service, and the like--occupations in which their abilities could find full expression. This suggests that, in the case of some occupations, those with extremely high ability may be as much out of place as those with very limited ability.

Trades and agriculture.--Only 50 of the 2,061 college students expect to enter some skilled trade or agriculture. This group is composed of students of all levels of ability. The data presented relative to the scholastic ability of Adventist students suggest that a very much larger number would doubtless find in

connection with agriculture and the trades, occupations on the highly-skilled or semi-professional levels, much more suited to their abilities and of easier entry than the few crowded professions to which they have almost entirely limited their choices.

Individual Institutions

It was thought that it would be of interest to present some studies made in individual institutions, since what has been presented has concerned the entire group. Figure 15 shows the relative ability of those choosing different occupations in the freshman group of College SC-1, 1937-38. Only the medians are available for this group. It will be noted here that the median percentile rank of those planning on medicine was 33, and what is even more remarkable, the group of lowest ability in the freshman class was represented by 9 students planning for the ministry. The investigator is happy to point out that 4 of these students changed their minds within a few weeks after entrance as the result of advice and counsel, and the relative standing of the group was improved materially.

Figure 16 and Table 21 are for a group of 341 students in SC-2 for the year 1936-37. The ability scores are given in terms of I.Q.'s. Figure 17 is for still another senior college. It will be noted that these patterns vary somewhat from institution to institution.

TABLE 21
SCHOLASTIC APTITUDE AND VOCATIONAL CHOICES
IN COLLEGE SC-2*

Occupational Choice	Number With Each Choice	I.Q.'s (Otis)			
		Range	Q-1	Mdn.	Q-3
Music	6	112-131	120	125	127
Teaching	85	88-144	108	116	121
Medicine	49	99-135	108	115	120
Ministry	51	77-127	100	113	116
Accounting	53	87-140	103	111	116
Home Economics . .	12	77-120	104	110	115
Nursing	69	81-133	99	106	116
Bible Workers . . .	10	86-120	91	103	109
Secretarial Work	6	94-131	95	96	98

*This table gives the I.Q.'s of 341 students in all four college years, who had definite vocational choices. The data are for 1936-37.

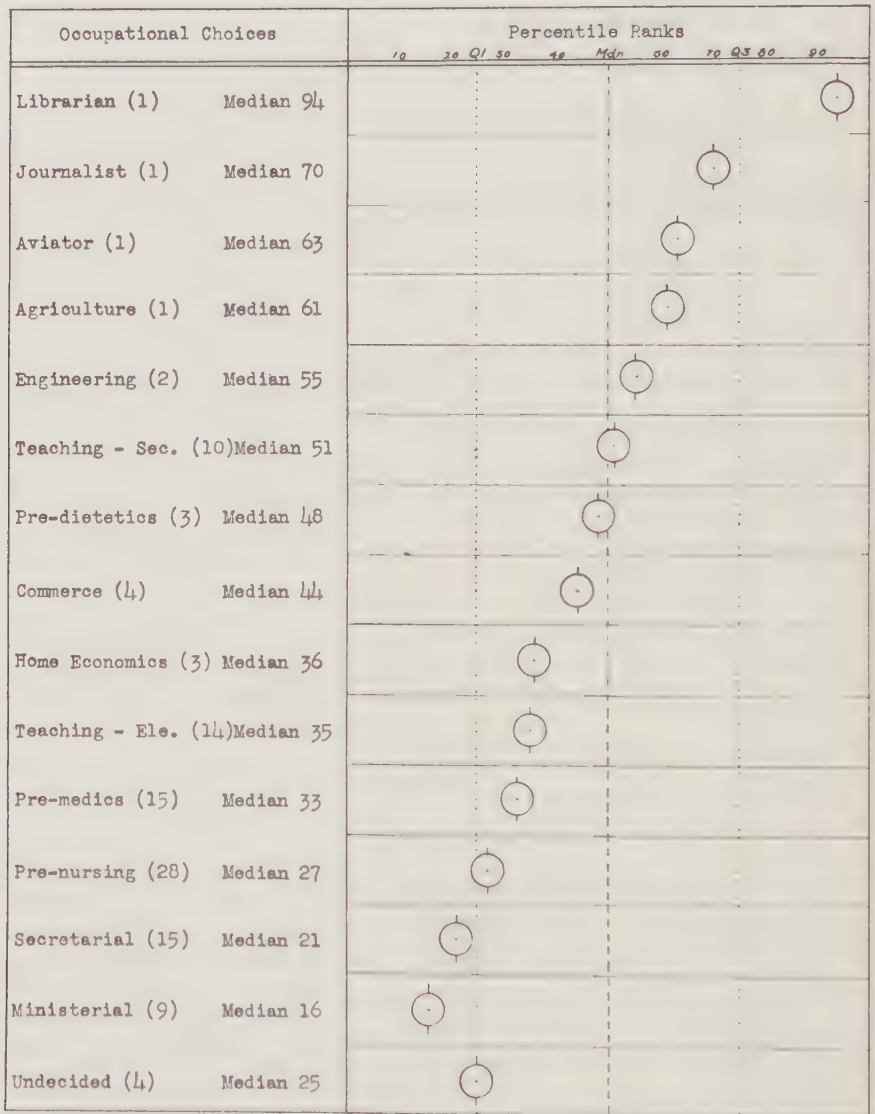


Fig. 15.--Scholastic ability of 1937-38 entering Freshmen in College SC-1.

The percentile rank (national norms) of only the median student in each occupational group is shown.

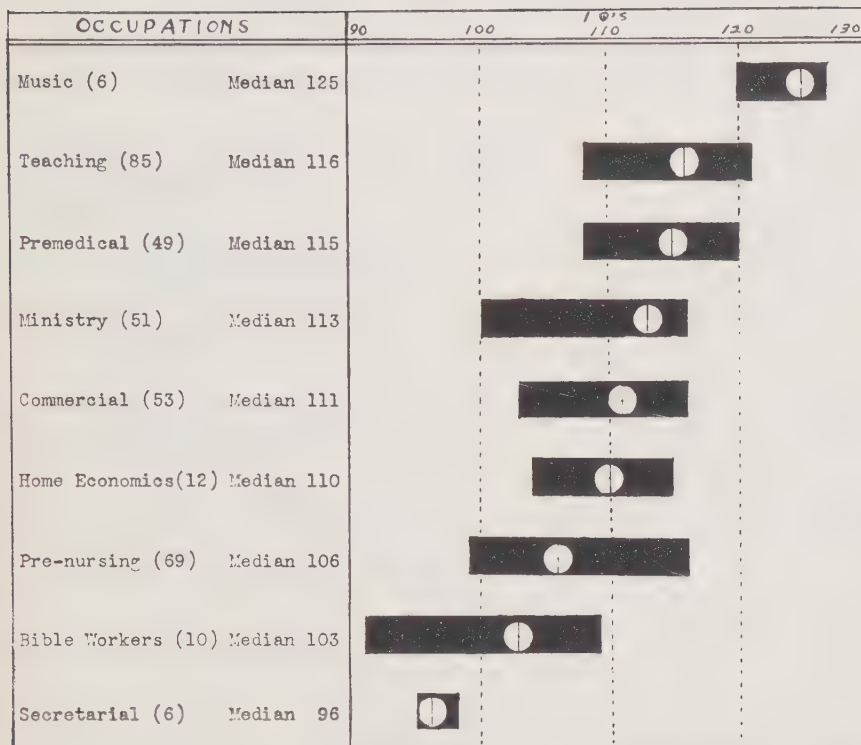


Fig. 16.--Vocational choices and scholastic aptitude at College SC-2.

The median and interquartile range in I. Q.'s (Otis) are shown for each group. The figures in parentheses indicate the number choosing each occupation. This chart is based on 341 students with definite vocational plans in 1936-37.

Ability as a Factor in Student Mortality

Student mortality in American colleges and universities is greater than is generally realized, but it was found to be unusually high in the Adventist institutions. Freshman mortality was especially high in these colleges.

The data presented in Table 2 (p. 11) show that in the Adventist senior and junior colleges 50.9 per cent of the students are freshmen;¹ 26.4 per cent, sophomores; 13.3 per cent, juniors;

¹Special students were found to be, for the most part, students who had entered without fully meeting the requirements for freshman standing, and so are included with that group in this calculation. Likewise the "post graduate" students have been considered as seniors.

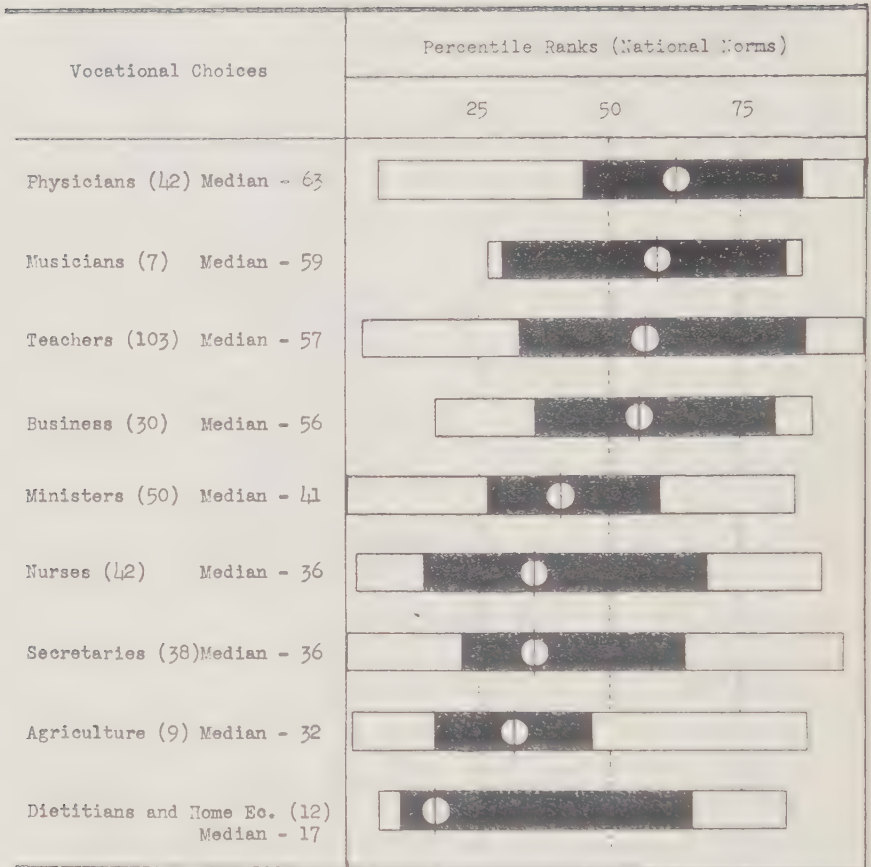


Fig. 17.--The scholastic ability of 336 students with definite vocational plans in College SC-6 in 1937-38.

and 9.4 per cent, seniors. The corresponding percentages for the senior colleges alone are: 47.7 per cent, freshmen; 24.4 per cent, sophomores; 16.3 per cent, juniors; and 11.6 per cent, seniors.

When all Adventist colleges and professional schools are considered as a group, it is found that 38.8 per cent of the entire enrollment are freshmen. The corresponding figure for freshmen in all institutions of higher education in the United States in 1936 was 30.35 per cent. In privately controlled universities, colleges and professional schools, taken as a separate group, the

freshmen constitute but 25.54 per cent of the total enrollment.¹

A more recent publication by the U. S. Office of Education² reports a study made in 25 American universities. The "gross mortality" of freshmen--that is, the proportion that withdrew during, or at the end of, the freshman year--was 33.8 per cent of the class, whereas in the Adventist senior colleges the "net" mortality in the freshman class was apparently 48.8 per cent. The number of freshmen who withdraw during, or at the end of, the first year appears to be not far from 50 per cent higher in Adventist institutions than in the rest of the higher institutions in America.

Some members of the college faculties seemed to be under the impression that this elimination is due wholly to the transfer of students to nursing schools, and the completion of the two-year curriculums. However, it was possible to verify that fully 60 per cent of the student mortality in these colleges is due to students who neither enter denominational employment nor transfer to professional schools. Some studies made in individual colleges may illustrate this point.

Figure 18 shows the proportion of freshmen who returned the following year during six successive years at an Adventist senior college.

In College SC-6, a follow-up study was made of the 120 entering freshmen of 1934. Seventeen of these withdrew by the end of the first semester. The average percentile rank of these was 27. The average of those who continued for two years was 55.5, and of those who remained four years, it was 73. Seven of this class completed two-year pre-medical curriculums at the end of their sophomore year. The average percentile rank of these was 89.

Figure 19 presents data of a slightly different kind. The 155 freshmen of 1935-36 in College SC-1 were divided into four groups according to their ability in reading as measured by the Iowa Silent Reading Examination. Investigation was then made to determine what percentage of the groups with different abilities returned the following year. It will be noted that, when the

¹Abridged Statistics of Higher Education, 1935-36, p. 14. Bulletin, 1937, No. 2. Washington: Government Printing Office.

²College Student Mortality. United States Office of Education, Bulletin 1937, No. 11. Washington: Government Printing Office, 1938.

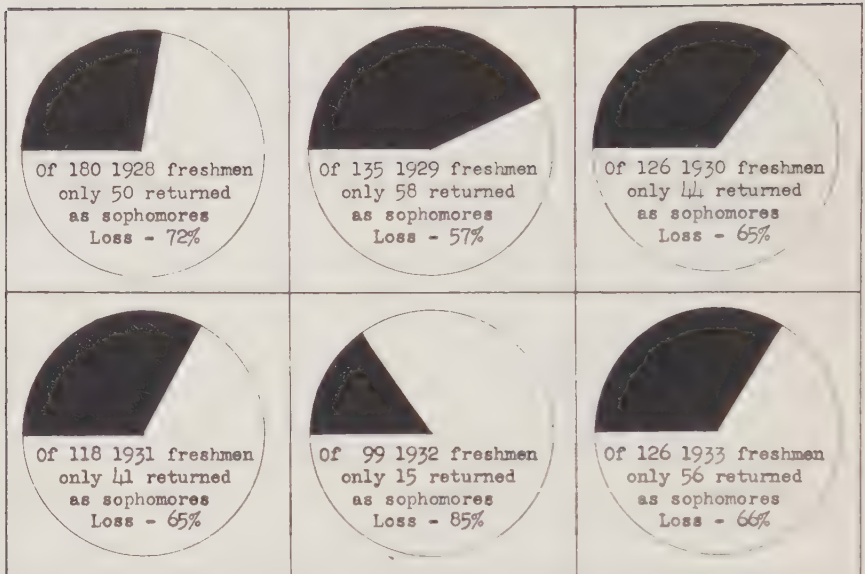


Fig. 18.--A six-year study of "Freshman Mortality" in one of the senior colleges.
Source: "Report of the Blue Ridge Educational Convention," page 181.

freshmen were divided according to their ability in reading "comprehension," only 46 per cent of those with the lowest scores returned the following year, whereas 63.2 per cent of those who received the highest scores returned the following year. These 155 freshmen were again divided into four groups according to their reading "rate," as the figure indicates. Of the slowest reading group, only 37.8 per cent returned the following year. Of the next group, 50 per cent returned, and of the 25 per cent who were the fastest readers, 68.4 per cent returned.

Figure 20 illustrates the relationship of ability, as indicated by marks, to retention in college. These data are also based on a study of the 1936-37 "liberal arts" and pre-medical students in College SC-1. It will be noted that the group of 155 freshmen was divided according to the grade-point average that they made in college during their freshman year. Three grade points were given for each of the hours earned in which the grade was "A," two grade points for each hour with a grade of "B," one

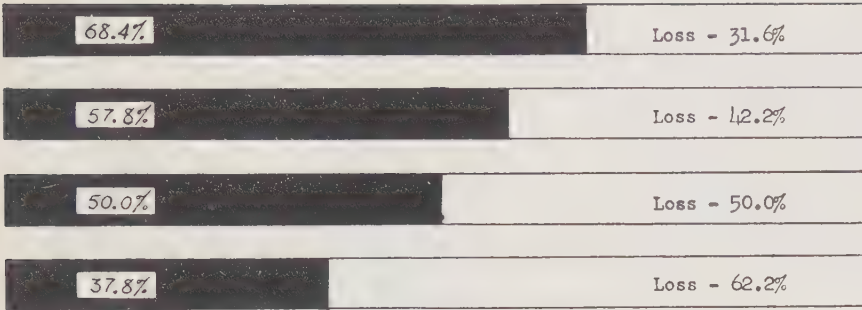


Fig. 19.--Rate of reading as a factor in "Student Mortality"

The 155 entering liberal arts and premedical Freshmen of 1936-37 in College SC-1 were divided into four equal groups according to their rate of reading as measured by the Iowa Silent Reading Examination. The percentage of each group that returned the following year is shown by the solid part of each bar. The upper bar is for the fastest readers; the next bar, for the group next to the fastest group; etc. When divided according to their comprehension scores, 63.2 per cent of the students in the highest quartile returned and 46.0 per cent of those in the lowest quartile.

Groups	Percentage that Returned						
	10%	20	30	40	50	60	70%
Highest Group (39) G.P.A. 1.24 - 2.71	79.5						
Third Group (39) G.P.A. 0.82 - 1.23	56.6						
Second Group (39) G.P.A. 0.33 - 0.80	46.2						
Lowest Group (38) G.P.A. (-1.00) - 0.32	29.0						

Fig. 20.--Student mortality versus school marks

The 155 entering freshmen of 1936-37 in College SC-1 were divided in four groups according to their grades. The solid bars indicate the percentage of each group that returned the following year.

G.P.A. signifies Grade Point Average computed as follows:
 "A" equals 3 points; "B" equals 2 points; "C" equals 1 point;
 "D" equals no points; "F" equals minus 1 point.

grade point for each hour with a grade of "C," no grade points for grades of "D" or "E," and minus one grade point for each hour for a grade of "F" (failing). The freshman class divided itself into four approximately equal groups on the following basis: The grade-point averages of those in the lowest quartile were -1.00 to 0.32; the second quartile had grade-point averages from 0.33 to 0.80; the third had grade-point averages of 0.82 to 1.23; and the grade-point averages of the highest quartile ranged from 1.24 to 2.71.

Figure 20 shows that of the 38 students with the lowest grades, only 29 per cent returned; 46.2 per cent of the second group; 56.5 per cent of the third group; and 79.5 per cent of the group receiving the highest grades. Here again, the data suggest that such factors as finance and health were certainly not the only factors in this "student mortality."

Only one more illustration will be used, and that from a different college. Figure 21 represents graphically the contrast between the holding power of the college with superior students and its holding power with those of lesser ability. In constructing this graph, it was assumed, since scores were recorded in terms of I.Q.'s, that students with I.Q.'s of 115 and above were individuals of superior scholastic ability. It was likewise assumed that students whose I.Q.'s were less than 115 were those of average and inferior ability. These data show that in the case of the superior students, the number of sophomores equalled 82 per cent of the number of freshmen in this ability group. In the case of the students with I.Q.'s under 115, the number of sophomores was equal to only 20 per cent of the freshmen. In the same way, the relative holding power is shown for juniors and seniors.

The pattern of student mortality in this college calls attention to a condition which apparently prevails in a number of the colleges, and that is that the greatest period of mortality is that of the first year in college. In fact, the data under consideration indicate that in this college students with I.Q.'s under 115 who continue beyond the freshman year are as apt to remain to become seniors as are those with I.Q.'s of 115 or above.

Further illustrations of this kind will not be introduced here, but it can be stated that, in every inquiry made in connection with this study of student mortality, it was found, without exception, that by far the highest rate of mortality was among

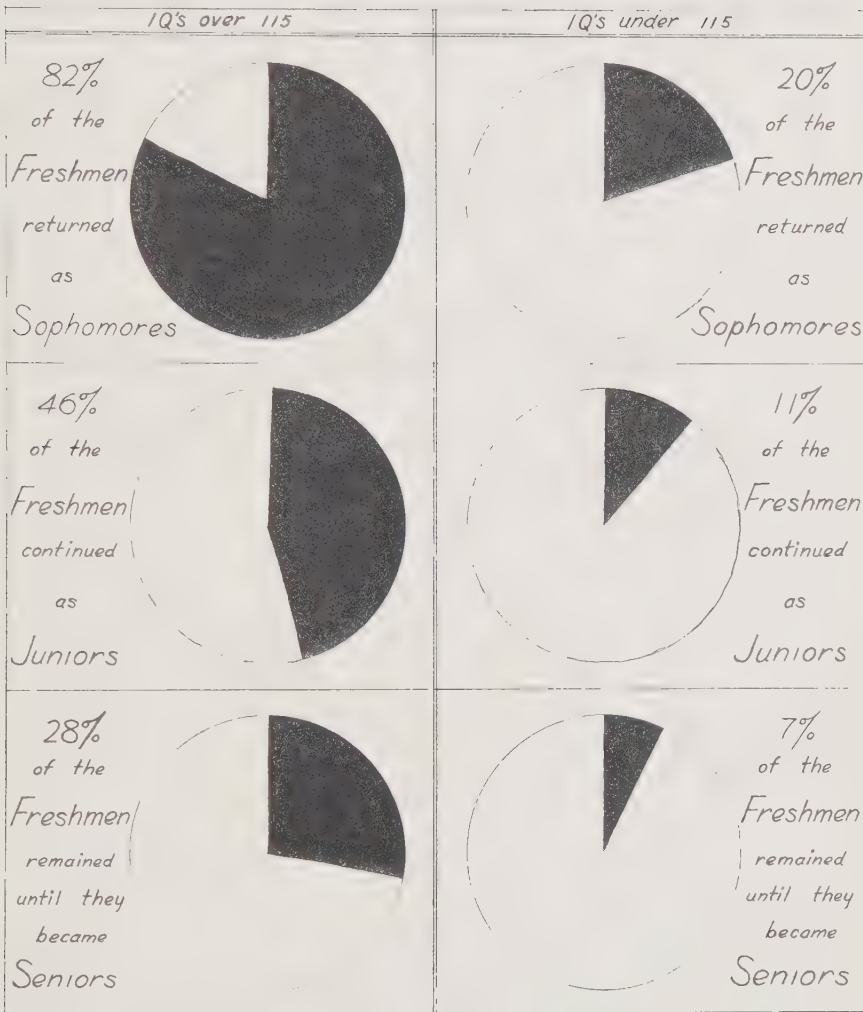


Fig. 21.--Student mortality in an Adventist college as affected by scholastic ability.

This graph is based on data taken from the records of College SC-2 for 1934-35. At this institution the percentage of superior students, (those with I.Q.'s of 115 or above), who continued their work from year to year was four times as high as was true of the students of a less amount of ability.

the students of lower ability. The curriculums in the Adventist colleges are composed almost entirely of materials offered for the purpose of preparing for the professions and for clerical work, and the student of the non-professional type naturally finds himself at a disadvantage.

The reader of this thesis is familiar with the fact that regardless of which of these measures is employed (psychological examinations, teachers' marks, tests of reading speed and comprehension, etc.), in every case one is measuring the student's ability to deal with the abstract and the symbolic. It is unnecessary to remind the reader that the courses which compose the curriculum under consideration are heavily weighted with materials of this kind. Whether it be mathematics, physical sciences, and other quantitative materials, on the one hand, or ancient and modern languages and other linguistic materials on the other, one is dealing almost exclusively with symbols and abstractions, and only the student with the type of mentality that can readily deal with the symbolic and with abstractions can find interest and be assured of success in this kind of activity.

Approximately half of those who enter Adventist colleges each year are hardly students for whom any experienced counselor would predict success in a professional career. No attempt will be made here to review literature dealing with the prediction of success in college. More than three hundred articles have appeared in recent years dealing with this question. The references given in the footnote¹ on this page are typical of the findings in these

¹J. B. Johnston, "Predicting Success in College at the Time of Entrance," School and Society, XXII (January, 1926); XL (December, 1934), 730. A. B. Crowford, "Forecasting Freshman Achievement," ibid., XXXI (January, 1930), 125-32. A. B. Crowford and P. S. Burnham, "Educational Research and Statistics," ibid., XXXVI (September, 1932), 344-84. V. A. C. Henmon, A Report on the Administration of Scholastic Aptitude Tests, "Bulletin of the University of Wisconsin, Serial No. 1786, p. 95. H. R. Douglass, Relation of High School Preparation and Certain Other Factors to Academic Success, University of Oregon Publications, Education Series, Vol. III, No. 1. E. F. Pottshoff, "A Statistical and Analytical Study of the Selective Admission of College Students" (Unpublished Ph.D. dissertation, University of Chicago, 1928). Wilhelm Reitz, "Predicting College Achievement," Bulletin of the American Association of Collegiate Registrars, IX (October, 1933), 1-14, (April, 1934), 162-81. Admission and Retention of Students, University of Chicago Survey, V, 2. Wilhelm Reitz, School Review, XLIII (January, 1935), 34-48. John Lewis Blair, "Significant Factors in Prediction of Success of Freshmen" (Unpublished Ph.D. dissertation, University of Chicago, 1931).

studies. Space will be given for but one citation from this literature. The following table and quotation from Dean Johnston of the University of Minnesota must suffice.

TABLE 22
COLLEGE SUCCESS MEASURED BY COLLEGE APTITUDE RATINGS
FRESHMEN 1923 TO 1927 INCLUSIVE*

C. A. R.	Number	Satisfactory Students	Percent	Prospects
96-100 91- 95	88 125	85 116	96.6 92.8	Very Unusual
86- 90 81- 85 76- 80	156 135 137	121 98 89	76.3 69.5 65.0	Superior
71- 75 66- 70 61- 65 56- 60	123 131 144 144	69 57 66 57	56.1 43.5 45.2 39.6	Good
51- 55 46- 50	150 141	45 34	30.0 24.1	Fair
41- 45 36- 40 31- 35	129 137 116	20 19 13	15.5 13.7 11.2	Poor
26- 30 21- 25 16- 20 11- 15 6- 10 1- 5	90 76 85 47 44 14	6 1 2 - - -	6.4 1.3 2.3 - - -	Very Poor
Total	2,212	898		

*John Black Johnston, The Liberal College in Changing Society, pp. 126-27. New York: The Century Co., 1930.

While 61% of those whose C. A. R. (College Aptitude Rating) falls in the upper half of the scale did satisfactory work, only 10% of those in the lower half did so. Of all satisfactory students, 89.4% come from the upper half of the C. A. R. scale, and 10.6% from the lower half. Finally, 99% of all satisfactory students are found above the level of 30 in the C. A. R. percentile scale.¹

The "college aptitude rating," which Dean Johnston employed as a basis for prediction, is the one used by the University of Minnesota. It was simply the average of a student's percentile rank on the psychological examination and his percentile rank in his graduating class. For example, if on the psychological examination his percentile rank were 45, and if his percentile rank in the high-school graduating class were 65, these two would be averaged and he would be given a college aptitude rating of 55. The rank in high school, as in the psychological examination, was always calculated from the bottom up. That is, a percentile rank of 75 in the graduating class was given to the student who exceeded in grade-point average 75 per cent of his classmates.

Were these two measures available for the 1,575 Adventist students, it is not likely that there would be any material changes in the ability pattern of the students, as far as the groups are concerned, although it is quite probable that there would be some fluctuation of individuals within the groups. That is, there would be some individuals whose ability is greater than their achievement, and who, therefore, would stand higher in the psychological examination, whereas certain other strongly motivated students of lesser native ability might stand higher in their rank in the graduating class than on the psychological examination. Since this study is more concerned with "ability to succeed in college" than with grades earned in the academy and high school, the measure which has been used is doubtless, for the purpose of this investigation, as serviceable as the "college aptitude rating" would be.

Relative Ability of Men and Women

Very little attention was given to the study of the relative ability of men and women in the schools, for the reason that the vocations which they had selected very largely separated them

¹John Black Johnston, The Liberal College in Changing Society, pp. 126-27. New York: The Century Company, 1930.

into different groups. For example, of those planning to study medicine, for whom scores were available, only 31 were women. The median percentile rank of the women, however, was only 45, whereas that of the men, excluding the women, was 54, which may indicate better guidance of the men than of the women. All of those planning to be dentists were men and all of those planning to be secretaries were women, with the exception of two. In the case of prospective nurses, only 18 of those having scores were men. The median percentile rank of these was 30, and Q-1 was 9, indicating considerably less scholastic ability on the part of the men planning to be nurses than of the women. One hundred and sixty of those expecting to be teachers, and whose scores were obtained, were men. The median percentile rank for these young men was 45; Q-1, 27; Q-3, 71--indicating, as with medicine, that the men who selected this vocation were somewhat more capable than the women.

The Appropriateness of the Vocational Choices in Terms of the Factors That Influenced the Decisions

The data presented so far have repeatedly suggested a considerable amount of confusion and misunderstanding regarding vocations on the part of the students. For example, it was noted that 67 per cent of all the students were expecting to enter just four professions--medicine, nursing, teaching, and the ministry--and this in spite of the fact that the number of probable openings certainly recommends against such limitation of choices.

Again it has become apparent that the Adventist students are not scholastically a highly selected group. As measured by the American Council of Education Psychological Examination, the median Adventist freshman is of somewhat less ability than the median freshman of American colleges in general.

Evidence has also pointed to the fact that the rate of "student mortality" is unusually high in the Adventist colleges, and especially so among those whose scholastic ability is limited.

The investigator undertook to discover the factors that have influenced the occupational choices of these students. In addition to the 2,061 college students, nearly 1,000 academy pupils were included also in this part of the investigation, for the purpose of discovering whether there were influences at work in the academies that did not prevail in the colleges. Table 23 summa-

TABLE 23

THE FACTORS THAT INFLUENCED THE STUDENTS' OCCUPATIONAL CHOICES

Factors Checked	Number of Checkings				Total
	College		Academy		
	Once "X"	Twice "XX"	Once "X"	Twice "XX"	
1. Like that kind of work	1,220	1,072	230	196	2,718
2. Want an occupation with future	1,308	413	248	88	2,057
3. Want occupation people respect	1,099	202	234	49	1,584
4. Occupation with permanent employment.	1,045	224	205	59	1,533
5. Want to do evangelical work.	638	594	76	59	1,377
6. Want to do parents' wishes	754	199	155	75	1,183
7. Want a good income	496	94	174	54	618
8. Influence of book or article read.	464	78	89	22	553
9. Influence of associates.	448	71	82	11	512
10. Advice of some teacher	407	102	54	10	573
11. Want occupation easy to enter.	213	23	78	14	328
12. Want to help others.	35	..	..	..	35
13. Felt divine call	20	..	..	..	20
14. Want clean, easy work.	18	..	..	..	18
15. Because of previous experience	4	..	..	..	4
16. Want to be more efficient.	3	..	..	..	3
17. Want independent work.	3	..	..	..	3
Total.	8,175	3,072	1,625	617	13,519

Factors 1 through 11 were on the questionnaires used. Numbers 12-17 were added by the students. Number 14 was printed on the blank used in one college only.

izes the factors which were checked by the students. Where some factor had been especially important in the student's decision, he was asked to double-check that factor. The number checked and double-checked is indicated separately for the college students and for the academy pupils, and all the checkings are grouped in the total column.

Comparatively few of the students added other factors than the ones listed on the questionnaire. In the construction of this

instrument, some effort was made to include factors that had been repeatedly stated orally to the investigator. Apparently these factors satisfied the students, because although space was provided for additional factors, and in some cases they were urged to take advantage of this opportunity, very few of them did so. In the table the factors have been placed in rank order on the basis of the numbers checked rather than in the order in which they appeared on the questionnaire. For example, "parent's wishes" appeared as the first item on the questionnaire, but it is in the sixth place as ranked by the students. Although the largest number indicated "they thought they would like the work they had chosen," it is possible there may have been little basis in many cases for their knowing whether or not they would really like that kind of work. It is of some significance that aside from this rather superfluous factor, "like that kind of work," the three that stood the highest in the number of checkings are "want an occupation with a future," "want an occupation that people respect," and "want an occupation with permanent employment."

The clinical psychologists have been insisting of late that the two fundamental human motives are for "security" and "recognition." Apparently Adventist students are not immune to these motives. Two thousand and fifty-seven want occupations with a future, and 1,533 want an occupation with permanent employment. Here clearly is a desire for security. One thousand five hundred and eighty-four want an occupation that people respect, and 818 want a good income. That only 1,377 stated that a factor in their choice of occupation was their "desire to do evangelical work" is probably due to the fact that this was understood by many as referring to those who expected to be ministers, Bible workers, and the like. It has been previously noted that the ministers and other workers have constantly held before the young people of the church that the supreme measure of their success would be their entering into active service for the church. That so large a number of students of limited ability should desire to become physicians, ministers, and enter similar professions is undoubtedly attributable to the fact that these occupations are the ones that people respect, and also those with a future, and that seem to offer permanent employment.

The desire to please their parents was more frequently checked by the college students than by the pupils in the acade-

mies. Apparently the counsel of teachers had not impressed the students very much, and when the students did check it, most of them seemed to consider it of minor importance. The group to whom the students should look for expert counsel either are failing to provide that counsel, or if it is provided, the students are hardly conscious of having received it.

Teachers' Advice to Those Planning to Study Medicine

An inquiry was also made to determine to what extent the teachers had participated in what seemed to be wise choices, and in the choices that appeared to be inadequate.

Fifty of the college students who were definitely planning to study medicine had scores on the psychological examination which put them in the upper quartile. Of these 50, 24 stated that their parents' wishes had been a factor in choosing this profession, but only one of the 50 indicated that the advice of a teacher had been a deciding factor. This teacher is a physician in one of the colleges. Apparently, no other teacher in the Adventist academies or colleges had suggested to any of these brilliant students and pupils the advisability of the medical course.

At the other extreme of the ability scale, 39 pre-medical students were found in the lowest quartile of ability. Fifteen of these students mentioned their "parents' wishes" as one factor in their vocational choice, and 8 of them stated that they had chosen the medical course on the advice of their teachers. One of these teachers was a physician. Some of the others were officers of certain of the colleges.

Informed as the teachers in these colleges presumably are of the ability required for the successful completion of the medical course, it seems strange that only one of the 50 superior students should be conscious of the influence of even one teacher in making his decision, whereas 8 of the 39 students who were manifestly incapable of the study of medicine should claim that they had made their decision with the advice of their teachers. The "parents' wishes" were in this case at least more consistent with the students' abilities than was the advice of their teachers.

Teachers' Advice to Ministerial Students

An analysis of the blanks filled out by those planning for the ministry revealed that 24 were in the highest quartile of scholastic ability. These students, so far as scholarship is concerned, certainly should succeed. Only one of these 24 students stated that his teacher's advice had been a factor in his choice of the ministry. At the other extreme, 45 students planning on the ministry were found to be in the lowest quartile of scholastic ability. In this group, however, 9 students stated that they had chosen their vocation at the advice of their teachers. No one should wish to attach too much significance to these student declarations, but it is apparent that either the students intentionally or unintentionally misrepresented the facts, or such vocational counsel as was given these college students was of questionable value. If the students' statements are taken at face value, one would probably conclude that it might be better for the teachers to give no counsel than the counsel that they apparently gave in regard to these two vocations.

Student Opinion as to the Adequacy of Their Vocational Choices and as to Their Counseling Needs

It was thought advisable to inquire not only as to the vocational intentions of the students, but also as to how they felt toward their vocational choices. Consequently, the questionnaire contained the following question, with a choice of three answers: "How do you regard your choice of a vocation?" The number checking each answer is indicated in Table 24.

These questionnaires were filled out before any discussion had taken place with the students concerning the possibility of their having made an unwise decision, but nevertheless more than a thousand stated that they needed more counsel regarding their decisions, and 277 stated that their decisions had been largely a matter of "guesswork." It is possible that many of those who stated they were "positive that their decision was right" would have felt very differently if information concerning the real situation had been placed before them.

The students were also asked to state what, in their opinion, was the kind of help that the Adventist youth needed most. The question asked was: "In order that Adventist youth may choose their vocations wisely, what, in your judgment, is the kind of

TABLE 24

ATTITUDES OF STUDENTS WITH REFERENCE
TO THEIR VOCATIONAL CHOICES

Attitudes Expressed	College Students	Academy Pupils	Total
"Positive that it was the right choice"	1,706	290	1,996
"Feel that it should be given more study"	851	197	1,048
"Regard the choice largely as guess-work"	192	85	277
Total	2,749	572	3,321

help that they need most? (a) extensive information about occupations which Adventists are finding suitable and in which they are succeeding, (b) expert counsel for the individual student as to the vocations in which he would probably succeed, or (c) counsel on other personal problems." The answers are indicated in Table 25.

TABLE 25

STUDENT OPINION AS TO THE KIND OF HELP THAT
THEY MOST NEED

Kind of Assistance Needed	College Students	Academy Pupils	Total
Information about suitable vocations	825	173	998
Counsel as to their individual aptitudes	1,952	346	2298
Counsel concerning personal problems	282	46	328
Total	3,059	565	3,624

CHAPTER V

SUMMARY AND IMPLICATIONS

Summary

1. The study was confined to the vocational adjustments of students in Seventh-Day Adventist educational institutions in North America because these students are encountering certain serious occupational problems not common to college students in general.

2. Seventh-Day Advensists, as a separate religious body, began their existence about 1844. The growth of the church has been constant and by 1937 consisted of 452,758 adult members located in every part of the world. The members in the United States and Canada numbered 164,490.

3. Certain distinctive beliefs and attitudes of Adventists definitely limit the range of their occupational opportunities. The most prominent of these is their strict observance of the seventh-day Sabbath. Their attitudes toward liquor, tobacco, the bearing of arms, and many forms of commercialized entertainment have definite occupational implications, as do also their belief in the nearness of the Second Advent and their desire to participate in the missionary program of the church.

4. In the educational philosophy of this religious group, the church is expected to provide training--elementary, secondary, higher, and professional--for all its youth, and each student is supposed to be prepared in its schools for some definite occupation.

5. Higher education is provided for in North America by seven senior and six junior colleges, eleven schools of nursing, a medical school, and a theological seminary. There is also an extensive system of secondary and elementary schools provided officially by the church, and a few academies and nursing schools under private control.

6. The enrollment as of October 15, 1938, in the junior and senior colleges alone was 3,612, and the total in all the higher and professional schools was 4,747. One student was in

higher education for every 3.7 Adventist youth of the college-age group. For the general population in the United States, the ratio was 1 to 7.8. This gives a ratio of 214 Adventist youth in college to every 100 of the rest of the population.

7. The thirteen colleges are managed by twelve separate boards of control. Each college had a fixed constituency in which it may promote its interests and to which it must look for support. Students are expected to attend the institution in their own "union conference" territory. No provision has been made whereby these colleges may unite or effectively coöperate in meeting the varied needs of the Adventist youth.

8. The central authority of the denomination, known as the "General Conference," operates with one board of control the medical school and the two large sanitariums and hospitals associated with it. This institution serves the entire North American division, and the method of control has been, apparently, entirely satisfactory. The seminary is managed in the same way, but by a different board.

9. The Adventist colleges are practically identical in their curricular offerings, which consist very largely of liberal arts and pre-professional materials. Some work is offered in education, business, and home economics, and occasionally a class in some vocation, usually agriculture or printing. The institutions operate extensive industrial enterprises, but these serve principally to provide opportunities for self-support.

10. Some Adventist educators are beginning to raise questions as to whether the institutions are meeting the present needs of the Adventist youth. Special concern is felt by some because of the high freshman mortality in Adventist colleges and the apparent failure of the institutions to provide suitable opportunities for students of somewhat limited scholastic ability.

11. Some of the objectives of the investigation were: (a) to determine the characteristics of suitable occupations for Adventists, (b) to discover the pattern of occupational choices now being made by Adventist students, and (c) to evaluate these choices. It was believed that the study would also provide: (a) a scientific approach to the problem of guidance in the Adventist institutions, (b) a technique for the evaluation of the curriculums now offered or contemplated, and (c) a basis for the clarification of the objectives in higher education of both the church

and its several colleges.

12. Since the founding of the first Adventist college in 1874, the attitude of the church has been that every student should plan to enter into full time service for the church or one of its sponsored activities, such as medicine and nursing. Because of this situation, an extended inquiry was made into the occupational opportunities that the denomination itself has to offer these students.

13. The investigation established the approximate number of openings now occurring annually in each of the various lines of denominational endeavor, and indicated methods whereby this information may be brought up to date as required in the future.

14. The total number of employees in all Adventist organizations and institutions in North America was 9,431 in 1937. Some 3,300 of these were connected with sanitariums and hospitals; 568, with the publishing houses; 1,900 with schools of all grades; 1,861 were ministers and conference office employees; and 1,802 were colporteurs and miscellaneous workers. Of this total, only 5,893 occupied positions in which at least some college or professional training is a prerequisite.

15. The openings occurring annually for college students indicated that approximately 700 students may expect some form of denominational absorption each year. This includes 75 accepted annually by the Adventist medical college and 225 by the nursing schools.

16. Of the 700 young men who enroll in Adventist colleges each year, about 200, or 30 per cent, will enter denominational employ, or will be accepted in the denominational medical school. Of the 700 young women who enter annually as freshmen, some 500, or 70 per cent, will enter some form of denominational service, or will be accepted by the nursing schools.

17. Important changes are taking place in the capacity of the church to employ its youth. The most striking change is in the number and qualifications of persons sent out as foreign missionaries. Previous to 1920, between one and two hundred young people were annually sent out by the Foreign Mission Board. At present the many schools recently established by the church in various parts of the world are supplying national workers to the extent that the Mission Board is now calling very few young people. The typical Adventist foreign missionary at present is a physician,

nurse, or an administrator. Almost every one has had a background of successful experience in some specialized field before being called to foreign service.

18. The opportunity to study medicine is largely limited to the 75 accepted each year by the denominational medical school. Adventist youth in other medical schools encounter rather serious difficulties, principally because of their strict observance of the seventh-day Sabbath. This also applies somewhat to students in non-Adventist schools of nursing.

19. The various occupations connected with the work of the church differ one from another in probable tenure and in remuneration. For instance, stenographers work for conference organizations and for institutions and receive much higher salaries than teachers in the elementary schools who, for the most part, are employed by the local congregations.

20. Since the majority of Adventist students must ultimately find occupations without the denomination, the study sought to set up criteria for the identification of suitable occupations for Adventists. Criteria, both positive and negative, were found in the distinctive beliefs and attitudes of this group. It was also possible to evaluate these criteria by a study of the experience of Adventists in a large number of vocations. Only occupations that permit a relatively large degree of independence of action, as, for example, the possibility of observing the seventh-day Sabbath with its continuously changing time of beginning and closing, have proved suitable for this religious group.

21. The distribution of Adventists by occupations, based on a study of 5,386 representative families, indicates significant deviations from that of the general population of the United States. Relatively large numbers are engaged in such professions as medicine, nursing, and the ministry, in agriculture and the skilled trades, and in certain small and independent business enterprises. On the other hand, scarcely any were found in the professions of law and engineering, and very few in transportation, communication, mining, and large-scale manufacturing.

22. The vocational ambitions of Adventist students are decidedly limited in range. Eighty per cent plan to enter a small group of professions. In 1930 only 5.64 per cent of all employed in the United States were in these same professions, and at present but 18.9 per cent of the parents of these students are so

occupied. An additional 13 per cent of these students are preparing for clerical work, making a total of 94 per cent of the entire group who expect to enter either the professions or clerical work.

23. The students seem surprisingly uninformed as to their occupational possibilities. Although the number of new Adventist ministers required annually in North America is but 45 at present, 543 students were expecting to enter that profession. Some 538 were taking the premedical studies, although the medical school accepts but 75 annually. On the other hand, very few are planning to become dentists, for example, or to enter certain other professions and semi-professions that are equally suitable for Adventists and that are somewhat less crowded than the ones they have chosen.

24. An unusual increase in attendance at the Adventist college has taken place recently. This has been accompanied by an apparent decline in the scholastic ability of the majority of the students in these institutions. The median percentile rank (national norms) of the 1938-39 entering freshmen was 38 on the American Council on Education Psychological Examination.

25. One undesirable aspect of this situation is the excessive "mortality" on the part of students with limited scholastic aptitude. The opening enrollment in the colleges for 1938-39 is grouped by classes as follows: freshmen, 50.9 per cent; sophomores, 26.4 per cent; juniors, 13.3 per cent; and seniors, 9.4 per cent. That low scores on psychological examinations, low marks in college subjects, and low reading ability were accompanied by high "student mortality" was verified in the institutions collectively and individually.

26. Those planning to enter each of the more difficult professions were found to be of the greatest possible variation in scholastic aptitude. Percentile ranks of from 1 to 99 appeared in almost every group.

27. No bureau of research has been maintained by any of these colleges or by any agency acting for them. While there has been a growing feeling of concern on the part of many as to whether or not the institutions were meeting the present needs of the students, there were few data available for study, and the fact that the enrollments were increasing has been apparently accepted as evidence that all was well.

28. A very large proportion of the students themselves stated that their vocational choices need further study. Nearly

three hundred classified their decisions as "largely guess-work." Almost the entire group stated that they needed "expert counsel in regard to their individual aptitudes and limitations."

Some Implications

1. The most inescapable implication of this study is that if the Adventist colleges are to continue to accept relatively large numbers of freshmen of limited scholastic ability, and for whom the pre-professional, professional, and liberal arts curriculums are definitely inadequate, then they should make immediate and reasonable provision for the instructional needs of that group.

That these needs cannot be met by the introduction of an occasional vocational course such as printing or agriculture into a curriculum weighted heavily with foreign languages, mathematics, and other liberal arts materials, and taught primarily for the benefit of students of ample professional ability and interests, should require no argument.

The reasons that have prevailed in the decisions to accept these "non-academic" students certainly demand a more adequate solution of this problem. Perhaps a clearer understanding of the needs of this group of students and a new conception of the possibilities of using their present facilities for a new educational program would lead these colleges in the direction of the "general college" emerging in some institutions, and to some of the various terminal curriculums on the semi-professional level now multiplying in a number of progressive junior colleges.

2. The need for guidance in Adventist colleges is doubtless more imperative than in the more typical institutions. An adequate counseling program would require not only a definite study of the aptitudes and interests of entering students, but in addition, a continuous survey of the occupational possibilities for Adventist youth. While the study reported in this thesis may be suggestive of the nature of the survey needed, it is nevertheless too limited to meet adequately the needs of the Adventist group. It is not improbable, for example, that there are many occupations entirely suitable for Adventists, but in which, so far, they have no representatives at all. That the General Conference should provide a Bureau of Research and Statistics, charged with this responsibility, seems obvious, since no single institution can be reasonably expected to perform this service. That it should

also organize a placement service for the North American field is another proposal that also might well receive serious consideration.

3. A third implication of this study is that the Adventist church should most carefully inquire into its vocational objectives in higher education. Until those who administer these colleges as officers and teachers, and those who patronize them as students and parents, have clarified in their own thinking the purposes that the institutions are expected to serve, there will inevitably continue to exist the present uncertainty as to what vocational preparation the several institutions should attempt to offer, and as to the occupations for which the individual students should attempt to prepare.

4. A final implication not only is more important than the preceding proposals, but if realized would doubtless include all that they imply. In the opinion of this investigator, the outstanding need of the colleges is a more efficient set-up for their control and general administration. Instead of fourteen independent boards of control, each with not only limited resources, but often limited vision and circumscribed interests, there should doubtless be but one Board of Higher Education for the control of all the institutions. The simple device of placing all church grants and subsidies under the control of this single board would doubtless furnish all the necessary authority. The needs in higher education of all the Adventist youth of North America might thus receive definite attention and an adequate solution in time.

The proposed board would decide not only how many senior colleges, for example, are needed, but also the fields of specialization to be undertaken by each. The programs of the junior colleges could be likewise integrated, and the funds saved by the elimination of many unnecessary upper-division classes could be used in part for the development of general and semi-professional programs on the junior-college level.

Ultimately, one catalogue would announce to all Adventist youth in North America the program of the church in higher education and in professional training. The special programs offered in each institution would be set forth, and present artificial barriers of conference lines would cease to restrain Adventist youth from going to the institutions best prepared to meet their various needs.

APPENDIX

(Questionnaire Used in the Institutions Studied)

Occupational Choices of Pacific Union College Students

Name _____
Classification: ____ Freshman ____ Sophomore ____ Junior ____ Senior
What is (or was) your parents' occupation? _____
Are they Adventists? _____ If so, do you consider their
occupation entirely suitable for Adventists? _____
If not, what are the undesirable features? _____

What occupation do YOU expect to enter? _____

Please check (X) any of the following factors that have influenced
your choice of an occupation; double-check (XX) those that were
the most important:

- _____ Your Parents' wishes
- _____ Advice of some teacher
- _____ Influence of some schoolmate or associate
- _____ Books and articles about vocations
- _____ You think you would like to do that type of work
- _____ You want an occupation with a good income
- _____ You want to do evangelical and missionary work
- _____ You want an occupation which people respect
- _____ You want an occupation with a future
- _____ You want an occupation not too difficult to enter
- _____ You want an occupation that offers permanent employment

How do you regard your choice of a vocation?

- _____ You are positive that your choice was the right one.
- _____ You feel that perhaps further study should be given the
matter.
- _____ You regard it as largely guess-work so far.

In order that our Adventist youth may choose their vocations wisely,
what, in your judgment, is the kind of help that they need
most?

- _____ Extensive information about occupations which Adventists
are finding suitable and in which they are succeeding?
- _____ Expert counsel for the individual student, as to the voca-
tions in which he would probably succeed. (This is to be
based on a careful study of the available facts that bear
on his talents, interests, aptitudes, and limitations.)
- _____ Counsel on other personal problems.

Add Comments or Questions, if you wish.

(Note: Measures of scholastic aptitude were taken from the
official records and written on each blank.)

(Questionnaire for Gathering Data in the Churches)

QUESTIONNAIRE ON S.-D. A. OCCUPATIONS

Name_____

Address_____

Are you in business for yourself?_____ If not,
for what kind of concern do you work? (For example, auto factory,
retail store, real estate office, etc.)_____

Just what is the nature of your work? What do you do?_____

Do you consider your work an entirely satisfactory occupation for
a Seventh-Day Adventist?_____

Why do you give this answer?_____

If you could choose a new occupation, would you do so?_____

If your answer is "Yes," what would it be? and why?_____

Add comments or suggestions on the other side.

Please return to--

Department of Education
General Conference
Takoma Park, Washington, D.C.

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